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FROM SCIENCE DEGREE TO DEEP SEA

ALTERNATIVE REALITIES

FAIRNESS AND JUSTICE: WOMEN'S SUFFRAGE



#### Ingenio

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University news

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#### **FULFILLING POTENTIAL THROUGH FAIRNESS** AND JUSTICE

his year, 125 years of Women's Suffrage is being celebrated in New Zealand and acknowledged internationally. Many groups across our wider community - including this University – are looking at where we have come from, evaluating where we are now, and thinking about what we need to do to ensure we develop in a way that honours the women who have gone before.

In the early days of the University of Auckland, gender inequity was stark. Sexism was ubiquitous; it was evident in attitudes and behaviour to women - in the home, at work and in society. It created barriers to participation and progress in university study and employment. Although one of the pernicious features of sexism, sexual harassment, was not even named until feminists in the 1970s coined the term, it was a common feature of women's lives.

As society changed, so did gender issues and priorities: by the 1960s there was increasing activism against discrimination, including gender discrimination. While highly-educated, academic Pākehā women were better represented in universities, there were still significant barriers that other women, and indeed other groups, encountered.

Our current equity work benchmarks well for its wide range of initiatives, against comparable international universities, including from the Asia Pacific Rim Universities (APRU).

As society changed, so did gender issues and priorities.

The University must continue to consider all issues that impact women, including family violence and abuse, a disproportionate load of unpaid work, and fertility issues. The latter still includes access to contraception and termination but now also incorporates the increasing need for and use of assisted reproductive technology.

It is also important to ensure that diverse experiences – like parenting or caring for an aged relative - don't disadvantage people who haven't had a linear career trajectory.

Although this year's anniversary focuses on equity for women, our equity mandate is wider. The University is committed to a safe, inclusive and equitable study and work environment to enable all people to achieve their potential.

Equity initiatives, policies and programmes are embedded across the University. They include partnerships with Māori and work with and for equity groups including Pasifika, people with disabilities, members of the lesbian, gay, bisexual, transgender, intersex (LGBTI) communities, people from refugee backgrounds, and low socio-economic students.

During the anniversary of women's suffrage we celebrate the gender equity achievements of generations of students and staff. Our University will best honour their legacy by remaining aspirational.

In 2019 each faculty and service division will include gender equity goals in their annual plans.

I look forward to seeing dramatic equity progress in coming years.

#### Trudie McNaughton

Pro Vice-Chancellor, Equity University of Auckland

CAN WE CELEBRATE OUR DIVERSITY AND CREATE AN INCLUSIVE SOCIETY?









#### GREEN LIGHT FOR **REC CENTRE**

he University is planning a new Recreation and Wellness Centre, now in design and scheduled to open in 2023.

The current Recreation Centre, when it opened in 1978, was warmly welcomed by students and for very good reasons, even apart from simple enjoyment.

Studies have shown that students gain many benefits from using a recreation centre, not only for their health, including mental health, but also for their social lives, their ease in finding friends and even their level of academic achievement.

New Zealand representative futsal player Naji Ghamri says the Rec Centre has been important for his success in his studies. "I'm in the fifth year of a medical degree," says Naji, "and it can be quite stressful at times. Playing futsal at the Rec Centre helps me refuel and energises me to do well in my studies."

The new centre's facilities will include a 33-metre indoor pool, four indoor courts, including a show court with spectator seating for 750, an elevated indoor running track and a full-size artificial turf on the roof. The number of students it can accommodate will double to 20.000.

New Zealand architects Warren and Mahoney are working to a student-focused brief with MJMA, a Toronto-based architecture firm with extensive experience building aquatic centres and recreation facilities in North America.



Architect's design of the new Recreation and Wellness Centre.

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#### NEW HOT SPOT FOR STUDENT **SCHOLARSHIPS**

edellín in Colombia, once known as one of the world's most notorious cities in the days of the Medellín Cartel, is now hot again, but for all the right reasons.

The city is fast becoming one of the most popular destinations among young New Zealanders benefitting from the Prime Minister's Scholarships for Latin America (PMSLA).

Eleven University of Auckland students selected for the 2019 round, including five doctoral candidates and six undergraduates, will complete 12-week internships with businesses in Medellín, and will receive valuable exposure to language, culture and business in the region.

This is one of the positive outcomes from a visit to Medellín last year by staff from the University's International Office, along with the Dean of Graduate Studies and head of the

University's PhD programme, Dr Caroline Daley.

University arts and commerce student Jonathan Burkin, who recently returned from two semesters' study abroad at EAFIT University in Medellín, said he found living there a transformative experience.

'The opportunity to study in a city that has bounded through the face of adversity and developed into one of the world's most innovative metropolitan areas was simply too good to miss."

"I would wake up each day knowing I would smell, hear, see or do something I would otherwise never have done. My experience has completely changed not only my previous ambitions in terms of potential careers, but my overall outlook on life."

Photo: Jonathan Burkin in Medellín.

#### **ALUMNI POEM**

Auckland: the renaming

Now that we know he was only another imperial duffer, a Caesar's bumbling sidesman and journeyman of Empire couldn't we quietly wipe him from the record and give back the name tangata whenua first accorded her -Tāmaki-makau-rau our clement isthmus between two harbours and two oceans. hub of the South Seas loved by too many?



This poem was published in the latest volume by Emeritus Professor C.K. Stead, That Derrida Whom I Derided Died: Poems 2013-2017, and is reprinted with permission from C.K. Stead and Auckland University Press. Photo by Marti Friedlander.

# FROM SCIENCE DEGREE TO DEEP SEA

In 2001 William Trubridge (pictured on this page) graduated with a Bachelor of Science from the University of Auckland. He then worked for just one year in genetic science before taking his life in a totally new direction. By 2007 William had achieved his first world record in freediving, and four years later became the first man in the world to freedive to a depth of more than 100 metres. Through the years William has made headlines all around the world. Here he tells a little about his life, in his own words.

**Photo:** Alex St Jean



Bahamas, which means it doesn't get as

much tourism, and is mostly just local

families of fishermen. So the life here is

very peaceful and the seas are abundant with seafood, although we are starting

to see the effects of overfishing and plastic pollution even here.

"It's a long way to come home to New Zealand, which means I only get back about once a year, but unfortunately there's nowhere in Aotearoa where I could train efficiently at depth as I do in the Bahamas.

"For me freediving is the most rewarding activity. It allows me to spend my time underwater, where the flora and fauna, as well as all sensations, are completely different to terrestrial life. As well as this, I experience freediving as a holistic sport that challenges me both physically and mentally. It's also opened doors for me into researching and exploring nutrition, meditation, yogic breathing techniques and the nature of consciousness.

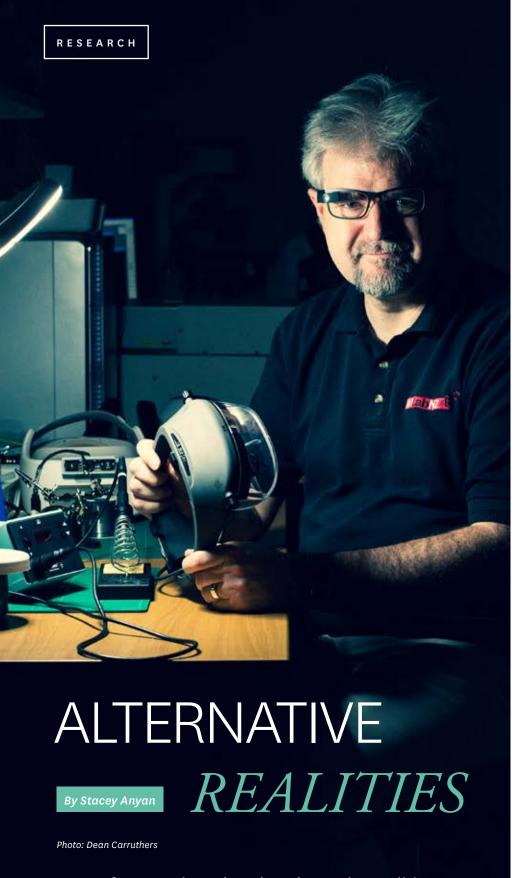
#### How has your study at Auckland contributed to what you're doing now?

"Freediving is easily the most divergent of all sports: it is the only one that takes place in full liquid immersion and the only one that involves long breath holds. As such, the physiology of the sport is unlike any other: splenic contraction, bradycardia, peripheral vasoconstriction and pulmonary haemocompensation are just a few of the many physiological processes that in sports are unique to freediving.

"Given that there has been comparatively little research into these processes and how to maximise them through training and preparation, it means that we freedivers have to also be scientists with our own bodies: observing the effects of different training methods, techniques, diets etc. So my degree at the University of Auckland, although it only led to one year working as a geneticist, has still proven invaluable at preparing me for the kind of challenges I would face when I began my career as a freediver."

If you would like to learn more about William's life and achievements, read his autobiography, Oxygen, published by Harper Collins Publishers in New Zealand in 2017, or watch the full-length documentary, Breathe, from ESPN

producer Martin Khodabakhshian.



Many of us were introduced to alternative realities by Pokémon Go, which seemed to spring into life from the pages of science fiction. But now the world of mixed realities is expanding all around us, with multiple applications of a surprisingly practical kind. Professor Mark Billinghurst, a world-renowned expert, is pushing the boundaries far beyond what we ever thought was possible.

h oh. A field technician working at a remote electricity substation in the Australian outback has accidentally shut a generator down, resulting in a power outage affecting thousands of residential homes.

The technician has no idea how to fix the problem, and the expert who does is a 45-minute drive away. When help arrives, the matter is sorted in minutes. But in the meantime, the power company has been stung with a six-figure bill by the state government for the hour-long outage.

World-renowned Augmented Reality (AR) expert Professor Mark Billinghurst, enlisted in May this year to spearhead the new Empathic Computing Laboratory at the University's Auckland Bioengineering Institute, reckons the hefty fine could've been avoided if the expert assistance were delivered through "remote collaboration": teleconferencing rebooted for the 21st century via next generation AR.

His vision is for the field technician to slip on an AR headset which streams 360-degree live video to the remote colleague's computer screen. The remote helper will then be able to see what the technician sees, and more: the 360-degree video allows the helper to look anywhere, rather than simply where the technician happens to be looking. Eye-tracking technology allows both workers to gauge where the other is looking. Inside the headset, the technician would be able to see virtual 'ghost hands' of the helper pointing out the wires that need to be fixed.

And then there's the 'empathic' element: the headset would have the capacity to relay emotional and physiological information about the wearer, such as their facial expressions and heart rate. Facial expression recognition technology currently exists in AffectiveWear, glasses with small photo-sensors which measure the distance from the glass frame to skin, which changes when we smile or frown or gasp.

The Empathic Computing Lab's mission, says Mark, is to develop software systems using emerging hardware technologies that allow people to share with others what they're seeing, hearing and feeling.

"We wanted to relate the cues you usually have in face-to-face conversation, as these show understanding. Using our technology, it all becomes a much more immersive experience. You feel as though you're standing inside the body

The possibilities for sharing experiences remotely are endless. Search and rescue. Surgery. Games and entertainment. You could be live with the band onstage.

of the person wearing the headset ... In trials of sharing eye gaze, we've found people experience a stronger sense of collaboration and communication."

The possibilities for sharing experiences remotely are endless, says Mark. Search and rescue. Surgery. Games and entertainment. "You could be live with the band onstage." Sports. "You're watching the 2024 Olympics at home, and an athlete competing in downhill mountain biking streams 360-degree content through a video atop their helmet. You get to see where they're biking, hear their heart rate and the sounds around them."

As he explains, the work conducted in the Empathic Computing lab is at the junction of three computer interface trends.

"The first trend is the way we capture content, which has advanced from still photography in the 1850s to today's streaming 360-degree video on a portable machine. The second is increasing network bandwidth – the super-speedy

networks that allow you to download a Netflix movie at home in seconds, and do higher-quality video conferencing. The third trend is towards 'implicit understanding', where computers are able to watch and listen to us in order to understand what we are doing. "In the 50s it was hard to learn how to program computers - you had to use punch cards, binary code and flick all sorts of switches. But now we have systems in our smartphones such as voice recognition. The Xbox has a camera which enables you to play games by moving your body around. So to some extent computers have become more human-like; they can recognise our behaviour."

Mark's curiosity about AR was first aroused in the 80s, back when headsets weighed three to four kilos and cost about \$50,000. (These days they're about 100 grams, and you can get a cardboard VR lens to wrap around your mobile phone for about five bucks.) The final-year project of his mathematics degree at the University of Waikato involved building a mathematical model of solar flares. Dissatisfied with plotting the data visually on a screen, he undertook a summer internship in Virtual Reality at Seattle's University of Washington, where he could access VR technology on \$250,000 computers which New Zealand simply didn't have. The university offered him a PhD, so he stayed on, his attention turning to Augmented Reality.

"With AR the goal is to overlay computer graphics on the real world and still be able to see your surroundings. With VR you separate yourself from the real world. For some tasks it's better to be able to see the real world."

In the 90s, for his PhD, Mark and his colleagues developed the world's first collaborative AR systems.

"Using our technology, two people could put a headset on, sit opposite each other at a table, see each other and manipulate virtual objects they could see in their headsets. An example we worked with was city planning. They could see buildings in their headsets that they could rearrange and work on together."

The inspiration? A Star Wars movie.

"There's a scene in *Return of the Jedi* where they're figuring out how to attack the new Death Star and they have a meeting, and a hologram of the Death Star appears in front of them. What we developed in the nineties would have made that possible. We

could've had a Death Star on that table instead of city buildings."

One of the challenges that Mark and his colleague Hirokazu Kato cracked – it took them six months – was to devise algorithms that allowed headset wearers to track their position relative to the real world, a key element of AR. Rapt with the results, they opted to share their knowledge in 2001 as ARToolKit, the world's first open-source AR software developers' kit. It's since been downloaded more than a million times.

"It helped spur the whole AR research community, because instead of having to spend months and months solving this important problem, we gave people the tool to do that, so they could focus on building applications that used it."

The consequent kudos also translated to more research funding for Mark, who continued his career at the University of Canterbury, where he created the HIT (Human Interface Technology) Lab NZ. A highlight of his 13-year directorship was innovating the world's first mobile phone AR advertising campaign in 2007 with Saatchi & Saatchi. A downloadable app allowed punters to use their phone to view zoo animals popping out of the newspaper pages, 3D style. He's spent sabbaticals working with the likes of Nokia and Google. At the latter he worked on Google Glass: 'smart glasses' with an optical head-mounted display. In 2015 he went to the University of South Australia, where he helped devise a free app to enable live-tracking of the top 10 cars and drivers competing in the Bathurst 1000, as seen on a 3D model of the circuit.

Home again and happy to be closer to his whānau, Mark has also been tasked with forming an Australasian consortium of AR/VR researchers – around 140 academics and students from nine universities across Australia and Aotearoa – in order to grow the industry: to create jobs and potentially millions of dollars in export revenue. Collectively the groups have already secured more than \$US33 million worth of funds for projects from a variety of local government, national and international sources.

Who knows what alternative realities the Australasian collective will dream up? Mark believes science fiction is the inspiration for many who work in computer interface technology – so perhaps our future lies in another scene from *Star Wars*.

# ALTERNATIVE REALITIES

ixed realities have been described as a step-change in computing, equivalent to the long-ago leap from programming with punch cards and perforated paper tape to the use of a screen, a keyboard and a mouse.

One way to experience the change is through Virtual Reality (VR), where a

person wears a head-mounted display and views 3D graphics which allow for complete immersion in a computer-generated world.

Another way to blend physical and digital worlds is through Augmented Reality (AR) technology, which aims to seamlessly superimpose virtual imagery

over a user's view of the real world, with the content able to be fixed in space, and the user able to interact with it.

VR aims to replace a person's view of the real world, while AR tries to enhance it. Collectively these are ends of a spectrum known as Mixed Reality.

Teams across the University, in the Faculties of Arts, Science, Creative Arts and Industries, Medical and Health Sciences, and Business and Economics are exploring its uses and possibilities, many of which are related to teaching, learning and training.

Here on these pages are two examples, both from the Business School.

# A SENSE OF **PRESENCE**

When David White, a lecturer in Information Systems and Operations Management, was interviewed for this story, he was about to attend a town hall lecture followed by an after-party.

he lecturer was someone he was greatly looking forward to hearing: Alex Kipman, the inventer of the HoloLens and of Windows Mixed Reality headsets, who would be presenting on his latest work.

David wasn't sure if he'd stay long at the after-party, but was certainly going to take the opportunity to meet some of the people from all over the world who would be gathered there, and to join in on some of the discussions that would be sparked by the lecture.

The only unusual thing about this meeting – apart from the world-renowned presenter – was that he wouldn't need a car or a taxi to get there. The headset on his desk would provide the means of transport.

David had been to a similar meeting the previous week. He knew what to expect. "You're sitting at your desk in the University of Auckland with a headset on – but what you're feeling is that you're this person walking around in a room. You have a little avatar with your name on your head. The other people walking round have labels on their heads as well, so you know who they are. When you look down you can see your body – you can see the 'avatarness' of it. When you raise your hand to ask a question, you can see the avatar hand.

"When the meeting ended," says David, "the lecturer said 'Well, that's it'. And some people left. A few gathered around the presenter and started asking questions. And I walked over to a group to listen to what they were saying. It was just like being in a room because the sound was all in 3D, so if you move away from someone who's talking, you move away from the sound as well. It was just like a normal meeting. I even felt that shyness you sometimes feel

when approaching a group of strangers. In so many ways it really was just like being there."

This was a 'virtual reality' scenario in that the participants, aided by a head-mounted display and 3D graphics, had 'stepped out' from their offices (or perhaps even from a beach or a café) to be completely immersed in a computergenerated world where their 'avatars' could interact directly with each other.

What's more, as David explains, an encounter of a similar kind could be played out as 'augmented reality', used not to replace the real world, but to enhance it.

For example, a colleague from anywhere in the world could step in to 'join' him for a conversation in his office, perhaps discussing and annotating a shared 3D scene.

What makes these experiences hugely different from what is offered by Skype or online discussion is the sense of presence, says David. Now people can be present in a space with other, currently abstract, avatars, but it won't be long before we can be present with facsimiles of ourselves. That sense of presence, unless experienced, is very hard to convey.

This example forms just a very small part of the explorations being carried out by David and his colleague Associate Professor Fernando Beltran, with the help of two research assistants. Their object is to find some answers to the fundamental question: How can mixed reality be used to augment teaching and learning?

# DISSOLVING THE WALLS

Bachelor of Property students, for the first time ever, are taking a 'virtual' tour of a construction site at which a former leaky building is being repaired. he students, from the course 'Introduction to Property', are being given Google Cardboard headsets – low-cost virtual reality headsets resembling Viewfinders from the 1980s but with the addition of a special space to insert a smartphone. When photos and videos captured on a special 360-degree camera are played on the smartphone, they appear in 3D, allowing students to be immersed in the experience.

Senior lecturer Dr Michael

Rehm, who drove the VR initiative, says it will allow students to see places that would be difficult, if not impossible, to see in real life. "We have about 225 students in this course alone. It would be impracticable to take them all into a construction site at once, and the recent changes to health and safety regulations would

make it even more cumbersome, if not impossible. VR is the next best thing to being there. And they can do it from wherever – their home, a café. It really takes learning out of the classroom."

Through VR, students will also explore the hidden working organs of the home of the Business School, the Sir Owen G. Glenn Building, including the heating and cooling equipment on the roof and the plant rooms in the basement.

Another idea is to use computer modelling to produce a virtual tour inside a cladding system engineered to be weathertight, as if the viewer could shrink like superhero Ant-Man.

"This will allow students to 'explore' places too dangerous or difficult to visit in real life," says Business School Dean Professor Jayne Godfrey. "VR has the potential to dissolve the lecture theatre walls, allowing students to go anywhere imaginable."



# WHEN LOVE CHANGES EVERYTHING

The love and care of his adoptive parents changed the world for Alex Kuch, but he also gives credit to the University of Auckland, which "opened up so many opportunities" to learn and then to apply the knowledge he has gathered.

By Danelle Clayton

he story of Alex Kuch, a recent
University of Auckland graduate
in Politics and International
Relations, begins half a world away in an
orphanage in Cluj-Napoca, Romania.

Given the basics of life but deprived of any affection, warmth, stimulation or love, Alex suffered from a condition called hospitalisation.

He habitually rocked, had no language and could not make eye contact with another human being.

His life changed forever when his adoptive parents Heidi and Walter Kuch rescued the 18-month-old and gave him a second chance at life in Germany, later relocating to New Zealand when Alex was 11, attracted by our education system.

"When I met Alex he was very quiet," Walter says, as he recalls the "basic and overcrowded" institution where some 200 children were housed.

"He had a black mark on his cheek. We were told it was from another child



who bit him when he tried to pinch an apple. There was not enough for them to eat so they fought over food. Alex couldn't walk. Nobody cared for him."

Walter bundled Alex up and took him to Bucharest for three nights while paperwork was finalised, while his new mother Heidi waited anxiously in Germany for their arrival.

"On the first morning in our hotel he woke up and I dressed him and he started rocking. That was a scary moment, it was a symptom of hospitalisation. We didn't know if he would recover, but regardless I thought 'he is our child and I will take him home'."

After a few weeks in a loving home with responsive parents, the rocking stopped and never came back. But the long-term outlook for Alex was grim. A psychologist advised that he would never lead a normal life, complete high school, or have the social skills to integrate into society.

With the help of intensive speech and fine motor therapy, Alex walked at 22 months and began to talk around the age of five.

This year Alex completed a Bachelor of Arts degree and is now an accomplished public speaker, researcher and adoption advocate.

"My parents weren't going to let a prediction determine who I was going to become," says Alex, now 23.

"My family is really proud of me, especially as I'm the first person in my family to have gone to university. It has been challenging; however the University has been very supportive. I had a writer for exams as I still have some fine motor challenges such as not being able to write neatly and quickly. But coming to university has opened up so many opportunities for me."

Alex's full list of achievements is lengthy and constantly growing. Standouts are speaking twice in Romania's parliament, the first time when only 18 years old, being named a finalist for Young New Zealander of the Year, and completing research looking at the experiences of adoptees.

He is also an advocate for re-opening Romania's borders to international adoptions. After the overthrow of the Ceauşescu government in 1989, thousands of abandoned children were adopted by overseas families, but corruption was rife and the world's attention was drawn to the terrible conditions. Romania closed its borders to international adoptions in 2001.

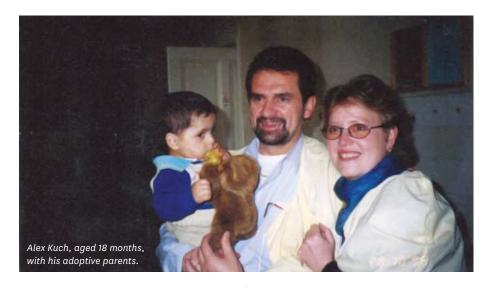
"Just because there have been bad instances, entire countries have closed international adoptions as a result. It's like saying just because a small proportion of a population has inflicted violence towards children then everyone should be prevented from having children. What we need is to develop better policies to protect children during the adoption process."

To this end, Alex is helping to establish a framework for global adoption policies at the third Asia-Europe Foundation Young Leaders Summit on ethical leadership, and will work with other global adoption experts at the International Conference on Adoption Research in 2020 in Milan.

He will also share his joint research with Dr Rhoda Scherman from AUT, which compiles the experiences of other adoptees published on the New Zealand-based 'I'm Adopted' website.

"I'm Adopted is a place where adoptees from around the world can connect and share their stories," says Alex. "With the permission of the adoptees, we have gone through dozens of stories to pull together the common themes of what adopted children go through. It's valuable knowledge for agencies and families, for example knowing when to intervene or what to expect, and to provide better support."

In an unusual twist in Alex's own story, he met his birth mother three years ago on a live Romanian talk show.



Alex has visited Romania twice to advocate for reopening international adoptions, but has never sought to connect with his birth parents. While he was speaking on television about his advocacy work, the show's producers blindsided him by bringing his birth mother and half siblings onto the stage.

"It could have been done more professionally, but things are a bit different over there," Alex says.

My parents weren't going to let a prediction determine who I was going to become.

"After I visited some orphanages and was then surprised by my biological family, I began to recall some visual impressions of my time in my orphanage. It was very emotional."

Alex has chosen not to stay in contact with his birth mother.

"Why would I? I have a mother and father in New Zealand," he says.

Heidi, his adoptive mother, says there was never an expectation that Alex would attend university. His younger brother Colin, also adopted from Romania two

years after Alex, is more hands-on and has started a building apprenticeship.

"Alex just loves to learn. Once he learnt to talk, whoosh, it was like a waterfall that never stopped. He was always asking questions," Heidi says.

"But we never put pressure on him to go to university. We just supported him in whatever he wanted to do. We didn't spoil the boys or give them lots of toys, but we spent lots of precious time with them playing games and doing activities as a family."

But Heidi says Alex was a challenging student and the German schooling system held him back.

"The New Zealand school system has been very good for Alex. When they discovered he was good at maths they pushed him, and then he was away."

Alex was a top student at KingsWay School, on the Hibiscus Coast where he grew up.

Now back living in Europe, he has begun an internship with children's rights and development organisation, Aflatoun International, based in the Netherlands. He also plans to return to Romania to continue to advocate for the re-opening of international adoptions, and is writing an autobiography chronicling his journey from the orphanage to New Zealand.

"Alex's background, interests and experience will help us to scale up our focus on children that are living in alternative care and will have to stand on their own feet as they reach the age of 18," says Roeland Monasch, director of Aflatoun International. "We want to make sure this specific group of children are empowered with these essential social and financial skills in order for them to be resilient and successful in their adult life. Alex will be a great resource for us."

#### APOLOGY AND RETRACTION

In the autumn edition of its alumni magazine, *Ingenio*, the University of Auckland published an opinion article by Professor Stephen May titled 'Why we should learn te reo'. The article used as its starting point the recent debate about the use of te reo on Radio New Zealand and referred to an interview of Dr Don Brash, representing the Hobson's Pledge lobby group, by Kim Hill. The article went on to argue for the benefits of bi- and multi-lingualism.

The article contained a sentence which described the objections by some (including Hobson's Pledge members) in the following terms: "The tirade was led by Don Brash, in his role as spokesperson for Hobson's Pledge, a racist and militantly anti-Māori lobby group."

Dr Brash, on behalf of himself and the founding members of Hobson's Pledge, has complained that the description of him and his members as "racist and militantly anti-Māori" was incorrect and defamatory and that Hobson's Pledge was established with the express purpose of opposing racism.

The University and Professor May accept that the sentence was incorrect and should not have appeared in the article. They sincerely apologise to Dr Brash and other members of Hobson's Pledge, and withdraw the sentence.



# A smokefree New Zealand by 2025: Can we? Should we?

In March 2011 the Government set a goal that by 2025 less than 5 percent of New Zealanders will be smokers.

Compiled by Helen Borne



## BOLD ACTION FROM POLITICIANS

ur national aspirational goal of dramatically reducing smoking in New Zealand from the current 15 percent to five percent or less of the population in the next seven years may seem a fantasy to some. I believe it is still a realistic target.

"Should we?" is the first question to ask. Is it the right thing to do? I believe doing all we can to support people who smoke to quit is one of the most important 'right things' we should pursue as a nation.

The facts are indisputable: smoking is one of the leading preventable causes of premature death and disability. It is a major contributor to ethnic and socioeconomic inequities.

Our tolerance of the tobacco industry and its damaging products is responsible for an estimated 5,000 premature deaths each year. The costs to our healthcare system are huge.

The other question is "Can we?". To mix slogans, yes, we can (make New Zealand smokefree again). But to do so will require bold action on the part of our politicians. They have acted boldly before – the Smokefree Environments Act was world-leading when introduced decades ago.

New policies should be introduced and existing policies enhanced to support more people who smoke to quit.

A first step: earmark the \$1.7 billion the government collects in tobacco taxes to help more smokers to quit. We need to allocate far more than the current \$62 million to supporting communities and families to become smokefree – incentives are effective and need to be considered as part of the mix.

Second, less harmful nicotine products, like e-cigarettes, must be more available for smokers to use. Simultaneously, a reduction in the nicotine content of all tobacco products should be mandated.

Third, to reduce violent raids on dairies, tobacco retailers should be offered support on how to run viable businesses without selling cigarettes.

Let's take smoking and the health impacts it causes far more seriously: we should and we can.

Chris Bullen is a professor in Public Health and director of the National Institute for Health Innovation. His main research focus is on finding more effective ways to help people who smoke to quit and improve their health.

## INCREASED TOBACCO TAXES

es, we should be determined to be smokefree by 2025.
Recently, there have been arguments against prioritising the smokefree goal over other social issues. I personally believe that people should be allowed to make their own choices. However, the detrimental effects of smoking on health not only concern the smoker but also non-smokers, who are involuntarily exposed to tobacco smoking. The issue of second-hand smoke becomes heightened when children are involved, because they may not speak up when exposed to tobacco smoking.

Another key issue is that, unlike with other products, there is no safe level of smoking. Some people get addicted after smoking just a few cigarettes. Therefore, prioritising the smokefree goal is important to the long-term wellbeing of the New Zealand society as a whole, as it concerns not only the smokers but the entire population.

Although the smokefree target has resulted in reductions in overall smoking in the country, smoking rates among Māori and Pacific people remain high, which adds to the challenge to achieve the goal to reduce smoking prevalence below five percent by 2025.

Research has found that increasing taxes on cigarettes is the most effective policy to reduce tobacco use and deter new smokers from emerging. While raising taxes on cigarettes has been effective over the past few years, a further increase in current tobacco taxes will be required to achieve the smokefree target by 2025. However, there are concerns about the effect of these taxes on smokers who are already living with financial hardship but have an addiction. So a comprehensive approach is required to achieve the target, rather than just relying on tobacco taxes.

At the same time, we should be cautious not to replace tobacco with new products such as e-cigarettes and start the vicious cycle again. Scientific evidence on the health effects of these products is only beginning to develop and there should be long-term policies and regulations put in place to protect both smokers and non-smokers.

The statistics at the end of 2018 will be very telling on whether or not we can reduce smoking prevalence below five percent by 2025.

Dr Ilaisaane Fifita is a professional teaching fellow in the Department of Marketing at the Business School. Her research interests include consumer behaviour, culture and social marketing in the context of tobacco control.

## SMOKEFREE? NO, FREE TO SMOKE

ew Zealand's Smokefree 2025 policy is, amongst other things, to use state power to make smoking so expensive and inconvenient that pretty much everyone stops. It goes too far.

Don't smokers impose costs on others, through their second-hand smoke and medical bills, and don't these justify preventing smoking? Stopping people smoking over others justifies regulations we already have, such as banning smoking in workplaces, and maybe ones we could have, such as banning smoking in cars with children. But it won't justify stopping people smoking when the passive smoking risk is nil or minute.

As for the healthcare costs, smokers already more than pay their way through tax, and that isn't counting the savings on their pensions. Using state power to drive smoking down to zero needs a better argument; avoiding costs to others is a dead duck.

So we come to stopping people harming themselves. I like freedom but tobacco isn't just another commodity. Smoking is a risk to smokers' health, and it is addictive too. Many smokers want to give up. Smoking ought to be regulated.

On the other hand, health isn't everything, not every smoker is addicted, and not every addicted smoker minds being addicted. Anti-smokers often can't understand it, but some people are happy smokers, that is, they prefer smoking to not smoking and they don't yearn to give up. The state should leave them alone.

Martin Wilkinson is a professor of Politics and International Relations in the Faculty of Arts. He has worked for a number of years on the ethics of paternalism, especially in public health, and the ethics of organ transplantation.

#### What do you think?

A smokefree New Zealand by 2025. Can we? Should we?

The views of our contributors are intended as the beginning of a discussion, which our readers can then respond to. We would love to hear what you think. Please write a letter to the editor (j.wilford@auckland.ac.nz) to continue the conversation or visit our Ingenio website www.ingenio-magazine.com.

**Disclaimer:** The views on this page reflect personal opinions and are not necessarily those of the University of Auckland.

# Swinging the balance in ENGINEERING

here was a time when engineers were almost all male. Now the balance has changed and that's easy to see at the University's Faculty of Engineering, where female students now comprise 26.2 percent of the student population. But the University has an even more ambitious goal – to achieve a level of 33.3 percent by 2020.

To inspire women who have an interest in training as engineers, here are two success stories of female engineering graduates who have forged satisfying careers and are making their mark in two very different worlds.





s a daily commuter, a visitor checking out the royal attractions, or on a stopover dashing from Heathrow Airport, it's hard not to be impressed at the efficiency and capacity of London's transport system.

And the smoothness of that experience is something that an Auckland Faculty of Engineering alumna significantly contributes to.

Sharon Duffy (CEng, FCIBSE, MIET) is a chartered engineer, a Fellow of the Chartered Institution of Building Services Engineers and a Member of the Institution of Engineering and Technology.

She is Head of Transport Infrastructure Engineering for Transport for London (TfL), leading a team of 500 professionals responsible for ensuring operational assets are maximised – she literally keeps the trains running on time.

As professional lead of the division responsible for setting the technical strategic direction of TfL, Sharon drives best practice, identifying and promoting best engineering techniques, technologies and systems. Her multidisciplinary team includes civil engineers and architects across Built Environment, Highways and Traffic, and Building Services Engineering.

Graduating from the University of Auckland in 1993 with a bachelors degree in Mechanical Engineering, Sharon left on her OE for the UK, where she worked in the manufacturing, building services and then rail sectors.

"After 22 years of living in London, I still love working here," she says. "It has certainly offered some amazing opportunities in my professional and personal life that are unique to this incredible city."

But despite making her life on the other side of the world, Sharon is very aware of what she took away from New Zealand.

"Kiwi culture is egalitarian, and I have carried the values of being fair and consistent throughout my work and personal life," she says.

"After graduating, my first engineering job was in the Fisher & Paykel Refrigeration Division, and I spent the first 12 weeks on the factory floor learning and performing all of the assembly tasks. That experience of learning from all the people within an organisation was invaluable, and I still endeavour to engage with everyone in the team and find out their perspective and ideas.

"Fostering a culture of equal challenge and allowing everyone's voice to be heard is very important for my team today."

At the University of Auckland she was one of only four females in a class of around 100 people. Her own experience was inclusive, but she says the current dean's goal of having women make up a third of undergraduates in the faculty is "fantastic".

"It is extremely heartening that there is University senior management support to increase the representation of females in engineering.

"In the UK we're only celebrating the centenary of women's suffrage, so we're still playing catch-up. The UK's workforce statistics show that just 12 percent of engineers are females. At TfL we are slightly ahead of the curve with 16 percent and we have just adopted a target of 30 by 30. We think aiming to increase the proportion of women in engineering to 30 percent by the year 2030 is a stretch target."

One of Sharon's aims is to increase diversity and inclusion in her team and in the wider TfL engineering team. To this end, she has launched a new staff network group called Females in Transport Engineering. One of its goals is to 'challenge and champion' the organisation

to ensure it tackles inequality and delivers on its commitment to improve gender diversity in engineering.

"Organisations need to employ a wide range of high-potential people, which encourages creativity and innovation and leads to great solutions to challenges. The call for increased diversity isn't about promoting one gender or demographic over another – it's about making sure that everybody has equal access to the opportunities the engineering profession offers; we all benefit from the results."

As winner of 'Best Woman Electrical and Mechanical Engineer' in the 2015 European Women in Construction and Engineering awards, one of Sharon's key takeouts was the importance of highlighting and sharing achievements.

"Women tend to hide their lights under a bushel when we should instead be shouting about our contributions. We tend to want to wait for everything to be perfect while our male colleagues jump in and apply for promotions or enter awards.

"The award didn't change what I had achieved, but it reached people who might not have been aware of my career, my role and what I do. And I hope it encouraged women to look for and take up more opportunities."

#### LONDON TRANSPORT

o other city is as recognised by its transport system as London. Its red buses, black cabs and tube trains are known the world over. Every day more than 31 million journeys are made across the network. TfL is the integrated transport authority that runs the day-to-day operation of London's public transport network and manages London's main roads. It operates London Underground, London Buses, Docklands Light Railway, London Overground, TfL Rail, London Trams, London River Services, London Dial-a-Ride, Victoria Coach Station, Santander Cycles and the Emirates Air Line cable car. Its assets include roadways still roughly following routes dating back to the Roman creation of Londinium (50 AD), the Underground – opened in 1863 in the reign of Queen Victoria, and Waterloo Bridge, nicknamed the 'Ladies Bridge' because of the contribution of women to its construction during WWII.



Elise Beavis observes the aerodynamic flow over the yacht with a wind wand.

#### DESIGNING THE FUTURE OF **SAILING**

By Briar Hubbard

In a sport where every second is crucial, design innovation can mean the difference between victory and failure.

t was for her contribution in these crucial moments that Engineering alumna Elise Beavis went down in history as one of the designers who helped secure the 35th America's Cup in 2017. At the time, she was just 22 and an intern for Emirates Team New Zealand.

On her first day, she was asked to help research the viability of the sailors cycling, as opposed to using the traditional grinding method. It became a bigger task than anyone expected, but they pulled it off – and for the first time, the team sailed using pedal power. This, ultimately, was one of the key factors for Emirates Team New Zealand in Bermuda, in taking down the opposition and sailing to success.

Elise also worked on various projects ahead of the 2017 campaign, which included fitting the entire boat, the chase boat and all the required tools and equipment onto the plane. They all sighed a breath of relief on the tarmac when the doors managed to close.

She travelled to Bermuda with the team for the campaign and returned as a hero, which she says was a great surprise.

"A couple of times at the supermarket when I've had my Emirates Team New Zealand jacket on, they would go: 'Oh, you're *that* girl!' But I guess from a design perspective it's quite nice, because at the end of the day, typically it's the sailors that are the celebrities."

Elise became the team's golden girl and they snapped her up full-time as soon as she graduated from the University of Auckland with a Bachelor of Engineering.

Talking about her passion for sailing and engineering comes naturally to her. It's a skill she has needed after



It often feels like all fun and games, but sailing is something the nation cares deeply about.

being swamped by media requests and invitations to speak at various events. She takes it in her stride and is particularly dedicated to showing school students there is a vast range of careers in engineering to pursue.

"My favourite talk I've done is the Auckland Girls' Regatta, which is for girls aged nine to 17, because I could really relate to them. With an older, more technical audience, sure, you get good questions and they understand things, but you don't feel like you are really making a difference to their lives.

"If I was one of those girls and an older version of me had come along and said 'these are the career opportunities in the sailing industry' and had been able to talk about working at Emirates Team New Zealand, that would have been hugely valuable for me."

She says it often feels like all fun and games, but sailing is something the nation cares deeply about, which she discovered when the team returned home with the Auld Mug.

"In Bermuda we were so isolated from

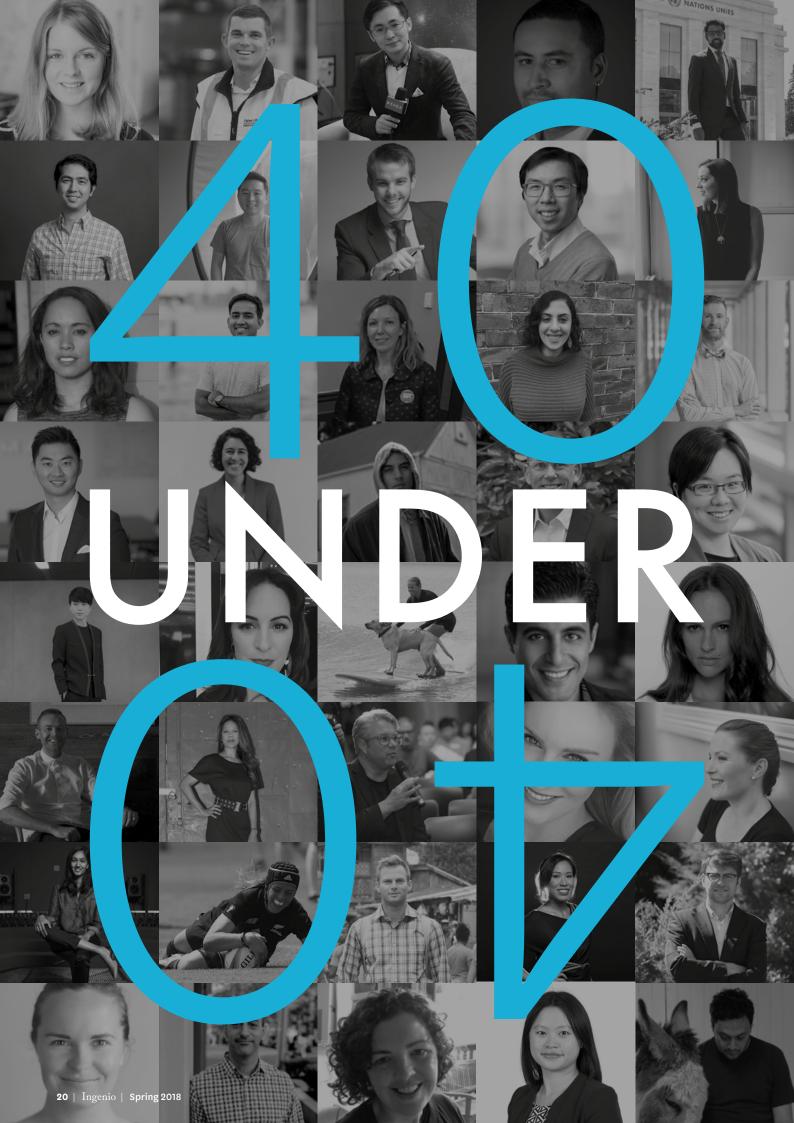
what was going on, we sort of didn't realise what it meant to people. It wasn't until we came back and did the parades, and you had all these people out in the pouring rain or freezing cold, [that we realised] people actually care and it has an impact on their life."

Her time at the University of Auckland was invaluable, and she uses the skills she learnt on a daily basis. She says it is a great place to study, particularly for young women.

"If you're going to go to any university in the world to study engineering, and you want to be around girls, Auckland is the place to go, they're very supportive."

It's all hands on deck as the team gears up for the 2021 campaign. Elise loves that she has been involved from the beginning this time around, where every day the aim is to make the boat go faster.

"Being involved from day one is cool, because you get the whole story, from the progression of the type of boat, concepts, and left-field ideas. This time I'm seeing more of the bigger picture and having increasing responsibility in my work."





e hear a lot about what it takes to have a successful career in the twenty-first century. This year's 40 Under 40 alumni are proof that while hard work and persistence are still important, adaptability is becoming an increasingly valuable and necessary trait in a world of rapid and continuous change.

Launched in 2017, 40 Under 40 not only recognises alumni who are mid-career and have already made significant achievements in their chosen professions, but seeks to inspire the next generation of alumni leaders to make a difference in the world, within the University of Auckland family and in their local communities.

With over 190,000 alumni in New Zealand and around the world, almost 50 percent of whom are under the age

of 40, the challenge of picking 40 takes a significant amount of work.

Mark Bentley (MBA, 2011), Alumni Relations and Development Director, says a wide range of criteria are used in selecting the final 40.

"Following the success of last year's 40 Under 40 we received a large number of nominations for inclusion in this year's list. Whittling down the list is never easy, but we have tried to reflect the breadth and diversity of our alumni in our final selection, and once again we can draw inspiration from their achievements."

From Sam Lucas, a social entrepreneur building a school to teach coding in Madagascar to Liz Alder, the founder of Walking on Water Surf, a programme that is transforming lives in Gisborne, this year's 40 Under 40 are proof that the University of Auckland alumni community is literally changing the world.

Mark Bentley says several themes emerged in the careers of those included in this year's list.

"Being prepared to take a few risks is important, particularly when establishing your career. Also, finding good mentors and advisers allows you to tap into valuable professional networks and helps you to consider possibilities you might not have previously considered."

Many of the nominees expressed their gratitude to lecturers and academic staff who had taken a personal interest in them and had been pivotal in their decisions to pursue opportunities that were often well outside their comfort zones.

CAN WE INCREASE THE CONTRIBUTION OUR COMMUNITY MAKES TO THE WORLD?







The profiles of this year's 40 can be found at www.auckland.ac.nz/40-Under-40 and alumni wishing to submit nominations for next year's list are encouraged to do so.

Our 40 under 40 for 2018: From left to right and top to bottom are Alex Casey, Jonti Rhodes, Allen Qu, Todd Karehana, Sudhvir Singh, Bowen Pan, Karl Loo, Stephan Grabowski, Alex Ng, Esther Young, Courtney Sina Meredith, Dipra Ray, Erin Polaczuk, Hala Nasr, Hadley Wickham, Charles Ma, Claire Achmad, David Dallas, Jason Myers, Jenny Yan Yee Chu, Jason Bae, Leilani Tamu, Liz Alder, Wared Seger, Nadine Levitt, Nat Cheshire, Nishika de Rosairo, Peter Dingle, Jody Visser, Pippa Dryland, Priyanka Shekar, Eloise Blackwell, Sam Lucas, Talita Setyadi, Thomas Scelo, Jess Weller, Jethro Marks, Melanie Morten, Elizabeth Chan, Shannon Te Ao.

# WHEN EVERY SECOND COUNTS

The stroke unit at Auckland City Hospital is one of just a few centres in the world - and one of the most active - in implementing a new treatment that is preventing deaths and transforming lives for people who have strokes caused by clots.

By Judy Wilford

o an economist, time is money. To Alan Barber, Neurological Foundation Professor of Clinical Neurology at the University of Auckland, time is brain cells.

When a clot prevents oxygen from reaching a part of the brain, "two million cells die every minute," says Alan. So when a person has an ischaemic stroke, speed is of the essence.

In New Zealand every year 9,000

people have a stroke. Of these, 2,000 are of working age, some in their 20s, 30s

There was a time when little could be done for those who suffered a stroke, except "good nursing", says Alan, plus physiotherapy and speech language therapy to promote recovery.

That was true 20 years ago when he left Auckland to do his PhD in neurology at the University of

Melbourne. But now the situation is very different, thanks to a large international study in which he has played a role.

Research Alan took part in during his four years at the University of Melbourne before he returned to establish the stroke unit at Auckland had focused on developing drugs to dissolve the clots that caused the strokes. These proved successful in breaking up or dissolving some of the smaller clots, but could frequently not dissolve the larger ones that can be more than a centimetre long.

The recent international study has succeeded in overcoming that problem through a series of controlled international trials, with patients from New Zealand taking part, in which a new procedure for retrieval of large clots has been shown to be effective.

"This is an amazing procedure, which has transformed the practice of neurology over the last three years," says Alan. "We are treating people who suffer the biggest strokes that anyone can survive. A lot of these patients wouldn't have survived. And if they had, many would be needing 24-hour care.

"For every five of the people we treat, one goes home completely normal. For every three people we treat, one is





significantly better. Now, 'better' may be going from private hospital care to being able to live in a rest home and use a walking frame. Or it can be the difference between living in a rest home and living at home with someone coming in to help. Or it can mean being able to go back to work."

So what is the new treatment and how does it work?

Described by Alan's colleague, neuroradiologist Dr Stefan Brew, as more like plumbing than rocket science, the procedure requires a retrieval device which looks a little like wire mesh. The device is fed (on the end of a wire) into the femoral artery and up into the brain. There it slides through the clot (which has the consistency of jelly) and once fully through, it is opened up to gather the clot and draw it out, with the help of suction.

"The sooner you can do it, the more of the brain you can save," says Alan. "But it takes a while for people to get to a hospital, have a brain scan, have someone like me go down to see them in the emergency department, and then be given a clot-busting drug or a clot retrieval.

"Our average time from onset to doing this is about 3.5 hours." Which is very impressive since his team takes patients all the way from Taranaki in the middle North Island and from Kaitaia and beyond in the far north, as well as from the local Auckland hospitals and all those in between.

The current phase of the research involves implementation, says Alan.

One focus is on managing the patient during and after the procedure, including looking at the efficacy of

different techniques of anaesthesia.

Another is on logistics of a highlycomplex kind: the speeding up of the whole process from the time the first symptoms appear to the arrival of the patient in the operating theatre, with the team scrubbed up and ready to go.

"This means changing the behaviour of people and systems," says Alan. "We can't do this treatment unless people get into hospital fast.

"It is a brand new treatment being done by a relatively small number of centres around the world, so it is important to report for the rest of the world on how much of this work we are doing, how long it is taking, and how to treat people more rapidly. We've just submitted a paper for publication noting the New Zealand experience.

"We need to look at where there are problems or delays," says Alan; though he adds that there is also a lot to learn from the successes.

"Recently we had a patient who had a stroke in the middle of the North Island. The patient got to the local hospital, had a brain scan to exclude the bleeding type of stroke, then got started on the clot-busting drug and was taken by helicopter to Auckland. The procedure was started within two and a half hours of the symptoms coming on, which was miraculous. So it is helpful to do research on how that happened. What did they do right? If we can cut another ten minutes from the procedure somewhere, that means saving 20 million brain cells for the patient."

Alan, who is deputy director of the University's Centre for Brain Research, is very grateful for the philanthropic support he has received throughout his career to enable this research. This has included the Chapman Scholarship from the Neurological Foundation of New Zealand, which supported him through his PhD in Melbourne, the payment of half of his salary by the Julius Brendel Trust when he returned to Auckland to set up the stroke unit, and further support from the Neurological Foundation, which funds his position as Neurological Foundation Professor of Clinical Neurology at the University, as well as funding two research fellows.

> CAN WE ACCELERATE BRAIN RECOVERY AFTER STROKE?



#### FROM A **PATIENT'S** PERSPECTIVE

upert Myhre is very grateful to the friend he was with when he woke around 5.30 in the morning to discover he had "had some kind of seizure," fallen out of bed and was feeling dizzy and disorientated – even to the point of falling again.

"I was trying to tell myself I'd be OK soon, though my brain was telling me something was terribly wrong," says Rupert.

"Luckily my friend was there and had the good sense to call an ambulance immediately.

"I remember getting into the ambulance, though I don't remember arriving at Waikato Hospital, where I was given an immediate assessment and diagnosed with a stroke."

He has no recollection of travelling by helicopter to Auckland Hospital, and discovered only when he woke a little after 11am that he had been treated for a stroke and had had a clot removed from his brain.

Rupert, who is 31 and had had no warning of the stroke, is one of the lucky ones. A week after the procedure he was back at home. Seven weeks later he was travelling with his sister in Asia. And now, another two months down the track, he is already back at work part-time though now on life-long medication and "still recovering".

Without the treatment, Alan Barber told him, he would have had just a one-in-four chance of living independently.

Alan is keen for as many people as possible to know the first signs of stroke as this may save someone's life. Just remember 'FAST'. Is there drooping of one half of the Face, is one Arm weak, and is there any Speech difficulty or slurring. At the first onset of any of those symptoms it's 'Time to act and call an ambulance'.



# Suffrage 125 Dare to Dream

By Tess Redgrave

Dr Jemaima Tiatia-Seath, one of the University's leading Pacific academics, has seen at first hand the struggles of many women in New Zealand today. On the 125th anniversary of women's suffrage in New Zealand, she talks about some of the factors that have contributed to her success, including her grandmother, pictured with her (left).

n 1952, 25-year-old Suresa Siapai Falaniko Mauava was put on a seaplane in transit from Samoa, and told by her father to go to New Zealand and find new opportunities.

Suresa arrived at Mechanics Bay in Auckland, alone, with no job or place to stay. However, she soon found her way to the YWCA in Queen Street and, within a week, one of the supervisors at the hostel had connected her to the Oakley psychiatric hospital in Point Chevalier.

Suresa stayed at the hospital's nurses' home and worked as a nurse-aide with psychiatric patients. A year later, she met her Samoan husband, Masuigamālie Vaialua George Gavet.

Now more than 60 years later, Suresa's granddaughter Dr Jemaima Tiatia-Seath sits in the meeting room at the University's Centre for Pacific Studies pushing the plunger down for her morning coffee. "My biggest role model is my nanny (grandmother)," she says. "She's 92 now and it gives her huge satisfaction to see how far her grandchildren have come."

It's a quiet morning for Jemaima in what is proving to be a high-profile and busy year. She is one of six panellists on the Government's Mental Health and Addiction Inquiry, as well as juggling academic roles as acting Co-Head of the University's Te Wānanga o Waipapa, School of Māori Studies and Pacific Studies, and as Head of Pacific Studies. Not that she doesn't look like she is taking it all in her stride.

"My nanny always said 'never be confined by any type of walls: invisible or visible'," Jemaima continues. "That's the thing that has completely enabled me to be empowered ... there's always been this unspoken challenge from her and my mother that we should 'dare to dream'. There's this scripture in the Bible that says cast your bread upon the waters

and what it is saying is 'be adventurous, take risks'.

"How will we ever be transformative? How will we ever flourish if we're not willing to take risks?"

Jemaima puts down her coffee cup and stands up, turning round to show me the writing on the back of the orange hoodie she is wearing. It is from her sister Mary's urban street brand DMRP (Don't Let Your Mind Rob Your Potential).

"See, this is our family, the environment we have created. I come from a line of strong women and we're smashing through glass ceilings."

For those who have smashed through glass ceilings you look at what's around them.

I had come to talk to Jemaima about Pacific women, and how she thought they were doing in New Zealand. It is soon clear her own story embodies the best of what she has to say.

"Like everything, we are products of our environment and how that has been set up. For those who have smashed through glass ceilings you look at what is around them: supportive families, inspiring role models, people willing to take a punt and see them for who they are and not where they have come from."

It's not about building resilience though. "I don't like that term," she says,

"it's nurturing what's already there."

In terms of leadership, Pacific women are doing well, Jemaima says, turning to my question. "Four Pacific MPs in Parliament, two women, and we've got more Pacific females coming into University (there were 3,659 Pacific students for 2017, 2,405 female) and here at Pacific Studies we provide a safe thriving space for them to do really well.

"But for many young Pacific females out there, it's a completely different story; the reality is, there is still significant inequity. For most Pacific women we're not doing too good. We're still the lowest paid: New Zealand European, Asian women, Māori and then Pacific. We're occupying the lowest tier.

"There are lots of identity challenges for our young Pacific peoples. You ask the younger generation how they identify and some will say 'I am Kiwi' and maybe Tongan or Samoan second. Everyone needs a sense of belonging regardless of ethnicity, but as a society, whose connectedness are we privileging most? And when we do that, who are we side-lining? For obvious reasons it's mainstream ... yes there is unconscious bias in New Zealand. I would go one step further and call it out for what it is, and that is institutionalised racism. You see it everywhere."

Over the last six to eight months, Jemaima and the other five members of the inquiry panel have travelled up and down the country and been exposed to "some very dark and painful stories".

"There are so many issues out there," she says. "We need to see a paradigm shift and the *talanoa* or conversation has to change. We're seeing the exposure of sexual violence among families in general, eating disorders, misdiagnosis of mental health issues. Māori and Pacific are more likely to come under the compulsory treatment order, to be

incarcerated. Drug addiction is massive. Lots of fetal alcohol syndrome. Mothers drinking while pregnant. Young mothers not receiving support. Services out there are not equipped to deal with cultural diversity to serve our communities well. All of this impacts upon our statistics."

For her Masters of Arts, Jemaima looked at why young Pacific peoples were leaving traditional churches; that led to a book Caught between Cultures. For her PhD she then looked at suicide and mental health and wellbeing in the Samoan community. As a result she is very strong on the need for culturally appropriate support, not just for Pacific women but for all Māori and Pacific in New Zealand.

"Society is set up in such a way that it's not whānau-centred. We need to shift that. In Pacific cultures you don't deal with the individual, it's not an individual issue. It's a family issue. It's a village issue. It's whānau, 'aiga. We need to deal to all needs, whether in health, education or justice, from a whānau-centered approach.

"There's a lot of cultural incompetence with services that are out there. They don't have the cultural nuances, sometimes unconsciously. People can believe they are acting right, but it could be racist or inappropriate and ultimately, detrimental.

"We need to move away from a deficit model for Pacific and move more towards a strengths-based approach. Find out what works for us and elevate our strengths and successes. We need to be supported to bring positive stories to the fore, whether it's by institutions or by allowing communities to come up with solutions."

As the Inquiry has moved around the country, with a presence at some 250 to 300 meetings, Jemaima has been amazed at the numbers of women showing an interest.

She knows from her own experience, and from Samoan culture, that acknowledging the strength of women in the community is key, and will be important going into the future.

"You can look in from the outside at Pacific women playing what one may think is a subservient role to the men in our culture, but Pacific women are the back-bone of families. That's how it's been constructed. We need to reclaim that, because our leadership has been our strength. From a young age, Pacific girls look after babies and we know it's looking after the community, the collective. In Pacific families this is distinctive.

"It's what keeps us together."



#### **FOUR GENERATIONS OF UNIVERSITY** WOMEN

meritus Professor of ■ Chemistry, Dame Charmian O'Connor, in accepting her Queen's Birthday Honour this year, acknowledged and expressed gratitude to "all the generations of women who have worked so tirelessly to create opportunities for women in education".

In particular, she honours the memory of her mother, Kathrene Maude McQuillan, who graduated in 1927 with a BA in English from Victoria University College and always trusted her daughter to follow her own path.

But what becomes very clear when talking to Dame Charmian's daughter Kate and her granddaughter Indigo, is that Charmian has earned the same debt of gratitude for herself.

A leading researcher and educator, Charmian spent more than 50 years teaching and mentoring students in what was then the Department of Chemistry (now School) at the University during a highlydistinguished career in which she has achieved any number of firsts, including first female and youngest recipient of a Doctor of Science in New Zealand and first person appointed to an equity role at the University (as Assistant to the Vice-Chancellor, Equal Opportunities and Staff Development).

It was very early in her academic career, while teaching students not much younger than herself, that she discovered a passionate desire to see others do well, particularly those who were struggling.

"I realised I loved teaching because it meant helping people. That has been a very large and rewarding part of my life."

Charmian's daughter Kate, whose first qualifications were related to her interest in horticulture - including a Certificate in Grape-Growing and Wine-Making and a Certificate in Small Farming - went on to complete an MA in Philosophy at the University of Auckland. Now she has achieved a life that comfortably aligns with her interests and values. While living with her partner on a 15-acre, sustainable and spray-free lifestyle block (with "lots of farm animals, free-range chickens and five acres of covenanted bush") she also serves as executive manager of the Ethics Committee at AUT and chair of the Northern B Health and Disability Ethics Committee.

In particular she honours the memory of her mother, who always trusted her daughter to follow her own path.

Indigo Poppelwell, Kate's daughter, is a current Elam student who is focusing on domesticated crafts for her Bachelor of Fine Arts.

"Historically, domestic crafts have been used to keep women's imagination in acceptable spheres, but I want to use the same crafts to set women's imagination free," says Indigo.

"As an only child, I always had plenty of encouragement from my mother and my grandmother. There was no doubt I would always have every opportunity for education."

Photo: Dame Charmian O'Connor (seated) with her daughter Kate (left) and her granddaughter Indigo. She is holding a photo of her mother.

# UNCHARTED **RESEARCH**

By Briar Hubbard

In an ancient city of Nigeria, Dr Avinash Sharma operates on a patient in the dark. A power outage has struck again, but the torchlight from his colleagues' cellphones allows him to continue (see below).

There's no mechanical ventilator, just a dutiful nurse squeezing the manual resuscitator, acting as the patients' lungs until they wake up.

It's an exercise in resourcefulness, unheard of back in New Zealand. But, at Obafemi Awolowo University's teaching hospital in Ile-Ife, blackouts happen weekly, sometimes for days at a time.

For six months, this was Avinash's job, as well as teaching at the university and conducting novel research. His work was part of the inaugural Global Cancer Disparities Fellowship, from New York's Memorial Sloan Kettering Cancer Centre.

The 36-year-old's research focus was breast and bowel cancer, both of which present at an earlier age than in developed countries and are more aggressive.

As part of the research project, he created a breast cancer tissue biobank to study immunohistochemistry and tumour microenvironments. He collected 300 stool samples from people in the community, to document each

individual's microbiome, the unique bacterial footprint of the gut.

"It's uncharted territory, so it's really exciting to be a part of that. With one eye on the future, I think there are definitely parallels that could be made with cancer care in the Pacific, and again, marginalised communities," he says.

Despite the unstable political environment, Avinash felt safe in Nigeria, but always erred on the side of caution.

"In the southwest and the town I was in, things were good, being in the hospital and university environment with a lot of security. I know that the northeast is a lot more unsafe where Boko Haram operates. You have to be sensible when you are in the area and respect what the locals tell you. I made some amazing friends and formed life-long connections with some very inspiring individuals."

Avinash also had his own health challenges to deal with, despite being on prophylactic medication.

"I managed to contract malaria a couple of times. It was quite an ordeal, but it was a very realistic experience of what day-today life is like in the region."

Avinash has lived in Manhattan, New York, since January 2017 and is based at the Memorial Sloan Kettering Cancer Centre, where he is training in surgical oncology. He loves the atmosphere of the city that never sleeps, but misses New Zealand too.

He completed his medical degree in 2006 and worked as a junior doctor for a year. He then lectured at the University of Auckland in the Department of Surgery, and later completed a masters in public

health at the University of Oxford. In 2016, he completed surgical training with the Royal Australasian College of Surgeons. He qualified to work in the United States in 2017 and in August of the same year, he finished his doctorate at the University of Auckland. His time here equipped him with the skills to hit the ground running as a house surgeon.

"I think we have a really good programme; the immersion into clinical from third year is fantastic. The medical graduates get really good exposure in their clinical years and you feel very prepared. I think that's unique compared to what I have seen of some of the residents in the United States and the training they get.

"I've been fortunate to have worked with professors and senior academics who have had international standing and that's opened up doors for me, so I'm very grateful to them in New Zealand.

"When I was studying my masters there was something that hit home to me, that 90 per cent of the world's resources are used in treating 10 per cent of the world's population. When you think about that, you realise something's not quite right.

"The dream would be to come back [to New Zealand] and pursue some of my research interests I've been able to start working on abroad."

See Avinash on video: www.bit.ly/AvinashSharma

CAN WE DRAMATICALLY IMPROVE CANCER SURVIVAL RATES?











By Margo White

Alison Talmage has a job she enjoys so much it "feels like play". It also allows the University's expertise to be shared for the benefit of the wider community.

√ wice a week, Elizabeth Donovan catches the bus from her home in Blockhouse Bay to attend choir practice with the CeleBRation choir at the University's Tāmaki Campus in East Auckland and with Sing Up Rodney choir, in Silverdale and Warkworth.

Anyone familiar with Auckland public transport will know that could make for a long day, and for Elizabeth it sometimes means rising early enough to catch a 6.50am bus. It's worth it, she says. "I find it really therapeutic. I always look forward to it."

Elizabeth has mild aphasia, a neurological condition consequent to a stroke, which inhibits her ability to retrieve and understand words. She joined the CeleBRation choir seven years ago, set up by the Centre for Brain Research in 2009 for people with neurological disorders such as aphasia, Parkinson's disease (which often affects

the volume and inflexion of a person's speech), or dementia.

Singing, says Elizabeth, seems to "open up other parts of the brain" and joining the choir has rebuilt her confidence, not only to sing (last year she joined the music group at her church) but also to speak. Singing strengthens your voice, she says, "and it helps your memory and concentration. Well, I think it does."

For some people with some neurological conditions, singing is easier than talking. It's unclear why, although there are theories. It could be that the rhythm and the beat of the tune makes it easier to recall and sing a lyric than construct and articulate a sentence. Music is also typically associated with strong emotions (happiness, sadness, hilarity) and memories with a strong emotional content attached to them tend to persist. It could be that music draws on different parts of the brain than spoken language does, and possibly more parts of the brain. If you look at the brain listening to music on an MRI "it's like a fireworks display," says Alison Talmage, music therapist at the University of Auckland, who leads the CeleBRation choir.

Besides, singing exercises the throat muscles, encourages people to breathe more deeply, to stand up straighter. Then there's the restorative and rehabilitative effect of focusing on nothing but the music. "It's about connecting with people as well," notes Elizabeth. Singing with a group of people in similar circumstances with a similar condition is fun, and what's good for the brain is likely to be good for the soul, and vice versa.

"A lot of people we work with are quite socially isolated," says Alison. "Their condition has made it difficult for them to participate in activities they did previously, or their friends have drawn away because they don't know what to say, or how to help. So just being part of the group of like-minded people with a strong interest in singing is very beneficial."

There is good evidence that choir singing reaps myriad benefits. Studies done internationally and at the University of Auckland, for instance, show that joining a choir is associated with a higher quality of life. "You'd normally expect someone with a neurological condition to have a lower quality of life than the general population," says Alison, "but that's not the case for our participants. Even though they aren't well, their sense of wellbeing and quality of life is very high."

Is there something about singing, though, that makes it different from any feel-good group activity? Yes, according to evidence produced by Robin Matthews, a speech and language therapist with the Bay of Plenty DHB. Robin, who has a musical background, was funded by the DHB to establish a similar choir in Tauranga, the Brainwave Singers, initially for people

with Parkinson's. It has since expanded to include people with a range of neurological disorders.

Robin recently graduated with his PhD, for which he did a randomised control trial to see if there really was anything special about choir singing as a treatment for Parkinson's, as distinct from other group activities. All participants had Parkinson's, but one group attended a Music Appreciation session, where they listened to and talked about music, but didn't sing. The other group participated in a choir for a year.

"Both got significantly better in quite a few indicators of wellbeing and voice," says Professor Suzanne Purdy, head of the School of Psychology at the University, who supervised Robin's thesis. "But the singing group rated better for quality of life, respiratory function and quality of voice. Clearly there are benefits in engaging in a fun group activity, and the appreciation group was a fun well-designed group activity for people with Parkinson's disease, but it didn't help them as much as the singing did."

Alison agrees that any engaging group activity is bound to boost people's wellbeing, "but I do think there are aspects of music that make it particularly beneficial." To sing, you have to think about your breathing, coordinate your voice and breath, sustain a melody and remember the words that go with it. "Music also has a lot of structural components that I think are helpful," she says. "There's the form of the song - a verse, a chorus, another verse - that trains us, on what's coming next, on the underlying rhythms, the pulse and meter of the song."

There is also good anecdotal evidence that in some cases, people can sing their way to better speech. "There is a view in neurological literature that ten years post a stroke, post aphasia, you're not going to get any better," says Suzanne. "But it's clear to me that some members of CeleBRation have got a whole lot better, in terms of their expressive language - you can have an easy flowing conversation in a way that you couldn't when they first joined the choir."

Many in the choir are certain their voices have got stronger. Alison recently put out a book, Only Connect: Poems and Stories from New Zealand Music which, as the title suggests, captures the lived and subjective experience of music therapy, from both patient and

practitioner perspective. A chapter on the choir includes the poems of Roger Hicks, in which he captures how he was told he shouldn't sing as a child, so never did. Then, as an adult and diagnosed with Parkinson's when, "The voice is so faint I cannot be heard/Frustrating, lonely and oh so absurd," he consulted his doctors and therapists and psychologists: "Sing, they all said, just sing." So Roger joined the CeleBRation choir, and now: "When I sing, my words can often be heard/ and I am part of a crowd, not alone, as we all share the pleasure of musical words".

If you look at the brain listening to music on an MRI it's like a fireworks display.

Like a song, the good word is spreading, with similar choirs being formed around the country. Alison established the choir in the North Shore of Auckland (Sing Up Rodney, in both Silverdale and Warkworth) last year, and choirs have been set up in Wellington (the Soundswell Singers), in Canterbury (the Cantabrainers), in Tauranga, the Wairarapa and Whanganui. Some choirs are led by music therapists, some by speech therapists, some by musicians, but all can get advice and support from the

CBR Neurological Singing, Choir and Voice Network, which Alison coordinates.

In an ideal world, Alison would like to have choirs set up in communities throughout the country, in partnership with DHBs. Suzanne agrees. "We know that the population is ageing, and that there will be more people with neurological disease. The model in Tauranga has demonstrated the benefits — one in which the DHB supported a therapist to run a community choir for people with neurological disease. That's the kind of model we'd want in every DHB; somebody needs to pay the therapist to run the choir and, because they're working with people with neurological conditions, to have the support of a medical team."

There are questions that have yet to be answered, such as what intensity and frequency of participation will get the best results. "Maybe it's not enough for people to be coming once a week," says Alison. "Perhaps it needs to be more intensive, or perhaps people need homework to do in between the sessions. It's probably not intensive enough at the moment to make a huge difference with their speech, but many members say that they are more confident with wordfinding and conversation. We definitely know that a good number of people really like it."

She's one of them. "I love it. I have the best job in the world. Career advisors tell you to go and find a job that feels like play, don't they? To be able to bring a smile to people's faces, and spend all my day thinking about music, or thinking about making music ... there's nothing better."



# THE UNIVERSITY GOES DOWN TOWN

or one night only, University of
Auckland academics took over
the city's pubs and bars for the
second annual Raising the Bar, a worldwide initiative that aims to advance
intellectual debate as part of the popular
culture of cities worldwide.

Of the 20 talks held in ten bars on the evening of 28 August, most sold out far in advance, with 2,600 people registered overall. But just in case you missed it, we're giving you a taste, with summaries of two of the talks. And make a note to book in early for next year's Raising the Bar.

See www.alumni.auckland.ac.nz/rtb for the podcasts of Raising the Bar.

#### DON'T CALL IT A **CRISIS**

nna Hood, senior lecturer in the Faculty of Law (left, below), impressed on her audience at La Zeppa in Freeman's Bay that the world is not suffering a "refugee crisis" as reported repeatedly, but that the overwhelming number of displaced people is a permanent feature of the international system – and that this needs to change.

"The world currently has 68.5 million displaced people and only a tiny percentage of them qualify for refugee status. This is because the definition of who is a refugee in international law is extremely narrow. It denies protection to large swathes of people despite the fact many of them face harm and persecution that is very similar to, and at times worse than, the harm and persecution faced by those who qualify as refugees.

"Even if we got the existing refugee system working perfectly through raising refugee quotas and freeing refugees from detention centres like those on Nauru, there would still be tens of millions of displaced people languishing in camps, slums and shanty towns around the globe. It is thus necessary for us to start broadening the conversation about the refugee crisis and how to tackle it. There is a need for fundamental changes."

#### POLITICS AND The **Arts**

ssociate Professor Nicholas
Rowe from Dance Studies
(right, below) posed some lively
and challenging questions to his central
city audience in Snickel Lane on how
cultural exchange can be politically
oppressive, and how political exclusion
can be challenged through creative arts
and community collaboration.

"While often promoted as benign, for centuries the arts have been used to advance colonial hegemony and to establish hierarchies of cultural power, while local arts activities are devalued.

"I am a community dance artist. This means I bring people together to creatively collaborate, to enjoy the communal creative process, and to value locally-inspired cultural products. To do this, I work in all sorts of locations, from refugee camps in the West Bank to urban slums in Asia, usually with people who find themselves 'outed' by policies and practices of exclusion.

"My work first involves lots of sharing of stories amongst the participants, leading into improvisations and compositions of dances ... The people I work with explore meanings of a 'public' space, and find ways of making their creative ideas, and thereby themselves, more visual and more valued."





#### FRIEND OR FOE?

#### **COLLABORATION OR COMPETITION?**

By Suvi Nenonen

he last few years have left many business strategists profoundly puzzled about the right way to approach competition and collaboration.

Are digital technologies leading us to a collaborative sharing economy or to a bitter battleground where technology platforms are fighting for domination? Is the road to national prosperity paved with multilateral alliances and trade, or are we better off pursuing bipartite deals?

Our operating environment has arguably changed, and the pace of change is unlikely to slow down in the near future. However, the basics of striking the right balance between competition and collaboration have not changed – and it all boils down to understanding your context from four perspectives: game type, time, complexity, and uncertainty.

#### Zero-sum games call for competition

Economic situations can be roughly divided into zero-sum games and positive-sum games.

Zero-sum games usually take place over genuinely finite resources, have a clear winner and loser, and thus call for distributive bargaining: you are doing everything in your power to secure as large a slice of a pre-determined pie as possible. In positive-sum games, on the other hand, the parties do not have a direct conflict of interest and it is possible to reach a win-win outcome through integrative bargaining – you are baking a bigger pie together, or at least agreeing when or how the pies will be baked.

So far so easy: zero-sum games such as bidding for a building site require competitive strategies whereas positive-sum games such as creating a new technological standard require collaborative strategies. However, things get more complicated when we broaden our analysis to include time, complexity and uncertainty perspectives.

#### Collaboration increases with longterm perspective, complex networks and uncertainty

Being a ruthless competitor is all fine and dandy when the situation is one-off: you won, they lost, game over.

But what if the game is repeated again and again? Squeezing your suppliers for even lower prices will improve your profitability in the short term, but bankrupting them may be bad for business. In a similar vein, adding more parties to the equation tends to tilt the scales towards a more collaborative approach to business.

Interestingly, many strategy frameworks depict extremely simplified situations: two competitors, or a customer choosing between two suppliers. However, the reality of business is more akin to multiple, overlapping networks of individuals and organisations. If you think you are being a shrewd strategist by excluding your competitor from an innovation network, it is unlikely that you have cut them off from viable innovation partners – your competitor will simply go somewhere else, with one crucial difference: you no longer have a clue what they are doing.

The final perspective to the competition-collaboration dilemma is the level of uncertainty. Under true uncertainty, causal relationships become invisible to us. Forget about trying to estimate probabilities for different outcomes – it will be impossible to tell

what will be the likely outcomes from a particular course of action. Carrying out competitive strategies requires being able to assess likely outcomes in advance, and thus strategies under times of uncertainty – such as technological disruption – tend to take more collaborative forms.

#### Nuanced approach needed

As so often in strategy, it is horses for courses when determining whether to compete or collaborate. In practice, most contexts have both collaborative and competitive elements in them — and thus it is not surprising that many strategy researchers are interested in understanding co-opetition. Unfortunately, most of the strategy teaching still overemphasises traditional competitive strategy — perhaps because they are simpler and thus more 'teachable' than collaborative and creative approaches.

However, we all ought to remember that using Donald Trump and Tony Schwartz's *Art of the Deal* as our guidebook in a positive-sum game environment, with repeat games, complex networks and genuine uncertainty, is likely to be a recipe for disaster.

Associate Professor Suvi Nenonen is director of the Graduate School of Management.
These views are her own and do not necessarily reflect those of the University.





Senior lecturer and alumna Ngarino Ellis (LLB, 1993; MA, 1997; PhD, 2012) is in a unique position to transform global art history.

By Julianne Evans

he really gratifying thing is that people who write about Māori carving don't usually look like me, they don't wear red lipstick; it's a beautiful thing," says Ngāpuhi and Ngāti Porou art historian Dr Ngarino Ellis.

We're talking about her warm reception on the East Cape, where last year she had a special launch of her award-winning book, A Whakapapa of Tradition: One Hundred Years of Ngāti Porou Carving 1830-1930.

Referred to by Ngarino as "a 17-year PhD", the handsome book won the 2017 Ockham Judith Binney Award for Best First Book, Illustrated Non-Fiction, as well as the Te Mahi Toi/Māori Arts

Award at the 2017 Ngā Kupu Ora, Celebrating Māori Books and Journalism, and the inaugural Best First Book award from the NZ Historical Association.

"It was five years in production and I'm so pleased it got the critical acclaim; it was great to have that validation," she says.

Even better, Ngāti Porou, whose rich tradition it documents, is delighted with it.

"We launched it on the Cape with 100 local people and a catered lunch and unlike a 'coffee table book', they tell me they're actually reading it and liking it; our people like books. They don't have access to those boutique journals that we're often encouraged to publish in."

A senior lecturer in art history in the University's Faculty of Arts, Ngarino focuses in her research on Māori art history, particularly Māori art and culture from c800 to the present day, and including both marae and gallerybased art practices.

She has concentrated on pre-1900 art, especially tribal carving, moko signatures, personal adornment and identity, with an emphasis on Māoricentred methodologies.

"Māori approaches to art history prioritise the personal, the role of the artist, and their relationship with their community. They use terms like mana, tapu, whakapapa and korero to understand art practices across time."

Being a Māori art historian, however, can be "a lonely place to be", she says.

"There aren't many people writing about Māori art history. You need your own people around you; I'd really like some colleagues."

Ngarino is currently the only Māori art historian employed at tertiary level in New Zealand. There used to be others, but they've since left the field; although being on her own has meant she's fostered fruitful collaborations with colleagues in other disciplines like fine arts, architecture and history.

One of the main problems is the feeder system into the subject from high schools, and the general 'devaluing' of the arts in schools and universities, she believes.

"There are only 108 high schools teaching art history as a subject at all; there used to be more, and there's not one Māori art topic in NCEA Level 3. Why is there not Māori art history? By the time art history students come to us, they've had three years of hardcore European art and we can't compete with that. It's

so frustrating and difficult. Where is the Treaty of Waitangi in all this?"

One of her specialist areas, always intriguing for the media, is art crime. She is a founding trustee of the Art Crime Research Trust, whose main aim is to hold annual symposia in the field in Wellington.

"I'm particularly interested in art theft within Māori culture. I've spoken in the media about the pair of valuable Lindauers stolen from a Parnell art gallery in 2017, and more recently, about the idea of their being sold on the dark web."

This semester, one of her favourite courses is called The Art of Gender Politics.

"We focus on art made by Māori, Pacific, Native American, Canadian, and African-American women film, textiles, tattoos, adornment, photography. The students are so engaged in the paper and really want to learn. I love teaching it."

In her role as the University's Convenor of Museums and Cultural Heritage, which she held from 2012 to 2017, she examined different approaches to the world of museums theory and practice.

"In particular I've been promoting the idea of writing and teaching about this field using only indigenous sources, which has been very exciting for me as an indigenous scholar."

Last year, the programme had 21 students, including the first cohort of Master of Heritage Conservation students. The numbers have tripled since she started in the area.

Thinking back, a life combining her commitment to her people and her interest in art seems inevitable, but it almost didn't happen.

"My mother Elizabeth comes from the North – the Bay of Islands – and was one of the first Māori women to study at Elam; she did a degree in Fine Arts, which is where she met my father, Professor Robert Ellis. He taught painting at Elam and was a notable artist himself, and still is."

She grew up immersed in the Auckland art world, "there were exhibition openings to attend every week", but also had a unique chance to experience life in the northern hemisphere.

"Every five years, our family (my father, me, my mother and twin sister Hana) went back to my father's home in the UK, when he had a sabbatical.

"We went to a little village called Kingsthorpe in Northampton, where our Granny and Pappy lived; I'm very familiar with all of Northampton and very close to my whānau there."

She left school – Westlake Girls, where her own daughters now attend – at the end of sixth form.

"I actually wanted to be a diplomat; I got some help from Margaret Taurere, an adviser in Māori Studies at the University in 1987, who advised me to do a conjoint BA/LLB. I wanted to do something to help my people."

She completed her conjoint degree, got admitted to the Bar, practised a little, but wasn't really enjoying it.

"While I was practising law, I studied a day a week for my masters in Art History, which I really liked, but I had to ask the question, 'How can I still help my people as an art historian?'

Māori approaches to art history prioritise the personal, the role of the artist, and their relationship with their community.

A key mentor, Māori feminist academic Emeritus Professor Ngahuia Te Awekotuku (University of Waikato), offered her a tutoring position in Art History at Auckland and she found herself at a crossroads.

"Should I stay in law or go over to art history?"

In the end she says, art history was her path, and anyway, she couldn't have raised her family on a lawyer's hours.

"I wanted to be the prime caregiver for my children, as my mother had been for my sister and me. That was very important to me, my family were my main priority."

So things have turned out pretty well. Her husband and their three children have been able to travel with her on her own sabbaticals, and enjoyed the experience. "We all went to Europe and the US earlier this year; my children are now very well-travelled, they get to see the benefits of what I do, and in fact, I'm hoping my oldest daughter might want to become an exchange student somewhere overseas. I think they're proud of me; they've seen me lecturing to 180 students in a lecture room and they get it."

The University of Auckland has been a hub for her family across a couple of generations.

"My sister Hana is a family lawyer based at Manukau, my mother's sister Helen has an MA in English, my cousin Liz has a Bachelor of Engineering and works in that field. I do value this University for its breadth of courses, and the quality of its teaching; and it's great to have our meeting house and our lovely Fale Pasifika."

However, she feels there still isn't enough support for Māori and Pacific academics.

"We're left to make our own connections. We live in New Zealand's largest city with a large Māori population – we have to recognise the presence of Māori."

Her most ambitious project to date, "which has to be with Auckland University Press by the end of the year", is *Toi Te Mana: A History of Indigenous Art from Aotearoa New Zealand*, a Marsdenfunded book she's been working on with the late Professor Jonathan Mane-Wheoki (CNZM) and Professor Deidre Brown from Creative Arts and Industries.

"It will be the first comprehensive history of Māori art, investigating the relationships, continuities and commonalities between the art of the ancestors and their descendants, using specially-developed art history and Kaupapa Māori methodologies."

Internationally, she says, art historians have begun to dismantle boundaries around Western European fine art that have "purposefully excluded indigenous making and makers," and this coincides with a time when Māori are leading research into indigenous knowledge.

"We are ideally placed within these discussions to help transform the discipline globally through the development of an innovative Māori art history."

CAN WE SAFEGUARD THE MĀORI AND PACIFIC CULTURAL HERITAGE IN NEW ZEALAND?





Making a difference with our international students

ecuring a job in a country vastly different from your own can be a daunting task.

A multitude of aspects makes this difficult, but the University of Auckland's Workplace Insights Programme (WPI), breaks down these barriers to open up a world of opportunity.

For alumnus Philip Hadfield, general manager of POP THAT, lending a hand to an international student keen to learn about New Zealand's work culture was an easy decision.

Philip joined the eight-week programme

# Keen to get involved?

If you're keen to volunteer please email alumnivolunteer@auckland.ac.nz to register your interest. Gifting your time to programmes like Workplace Insights can make a world of difference.



# Update to win

Update your details with the Alumni Office by 30 November 2018 and go into the draw to win an Apple iPhone 8 Plus – we have five to give away! Head to:

#### www.alumni.auckland.ac.nz/update

By updating your contact details with us, you can ensure you receive exclusive invitations to alumni events around the world, special offers and discounts.



## Upcoming activities

We host alumni and friends networking functions and special events throughout the year in New Zealand and all over the world. These are just some of the events coming up in the run-up to Christmas:

- Hong Kong Alumni and Friends reception
- Alumni for Alumni: Melbourne Stories
- Seattle informal drinks
- University of Auckland Society AGM and Christmas celebration

Head to: www.auckland.ac.nz/events

that connects international students with alumni, providing students an experience of New Zealand's work force.

During the programme, marketing student Mico Huang from China shadowed Philip, getting an insider's look into POP THAT, including being a camera assistant for a photoshoot and a production assistant in a music video shoot, and attending an interview with a potential contractor.

"We decided to involve him in as many diverse activities as possible, to broaden his understanding of what it means to

work in marketing. Mico was excited and willing to be as involved as possible, which was great," Philip says.

"Taking part in WPI was, in a way, like being a tour guide for New Zealand working culture. Instead of a field trip, we looked at the ins and outs of what makes our economy tick. It was fun."

He encourages other alumni to get involved, to provide a valuable experience for international students.

"Do it, it comes and goes very quickly, and your commitment is limited merely to the time that you're willing and able

to put in. However, the impact and the benefit for the student is vast.

"From our time together, and some advice I was able to give on his application process, Mico secured a work placement and is now ready to experience another side of New Zealand workplace culture that he otherwise may not have had the opportunity to do."

WPI is a biannual programme that was established in 2016. It has connected 229 students with 111 generous alumni to date. We are extremely grateful to alumni like Philip, who make this programme possible.



#### Connect with us

www.facebook.com/UoAAlumni www.linkedin.com - Auckland University Alumni & Friends www.twitter.com/AucklandAlumni







### New contact for Singapore

■acebook staffer Anisha Chawla's passion for forging connections and empowering others has led her to volunteer her time to support the alumni community in Singapore.

Her new role will see her facilitating alumni events, as well as being a friendly point of contact to help connect alumni.

catching up with fellow alumni who live in Singapore. Anisha studied for International Business and Marketing.

A highlight of her job is working directly with entrepreneurs and business owners, while being able to travel a special passion for helping start-ups and social enterprises and providing opportunities for empowerment of the under-privileged.

She enjoys Singapore's "amazing connections" with the rest of the world, and admires its modern architecture.

Find out more and connect with Anisha (pictured in the map above): www. alumni.auckland.ac.nz/globalalumni





#### MICROPLASTICS: THE HAZARD YOU CAN'T SEE

elving into the depths of how microplastics affect coastal environments is the latest challenge for Dr Julie Hope, a research fellow from the University's Institute for Marine Science Research.

Recent studies show up to 12.7 million tonnes of plastic may be entering our marine environment annually from landgenerated waste. However, the majority of that field data is from floating debris. Little is known about the accumulation of plastics in coastal sediments, which is what Julie aims to change. She says microplastics are an invisible dilemma. "We can see plastic pollution all around us, yet this is only 20 percent of it. In fact, 80 percent of the plastic pollution probably goes unseen because it is smaller than 5mm. However, it could be negatively impacting coastlines.

"Large plastic can break down through weathering, but it will not fully degrade in the ocean. Instead, plastic will break down into smaller and smaller pieces, resulting in microplastics. These microscopic particles, although invisible to the naked eye, can potentially cause a variety of ecological and environmental problems."

They may be affecting small microalgae that live on the sediment and, in turn, influencing ecosystem functioning. "This is one of the reasons I began working with microplastics. We are currently studying the distribution of microplastics in New Zealand soft sediments and

trying to understand what governs their distribution, their fate and their effects on various ecological processes."

Julie, with students and interested residents, has conducted initial field studies looking at the distribution of microplastics around both sandy and muddy coastal sediments in Auckland.

"We hope to better understand how the concentration of microplastics relates to, or changes, biological and physical properties of the sediment, for example, the amount of microalgae, the local water system conditions and their interaction with animals living in the sediment.

Large plastic can break down through weathering, but it will not fully degrade in the ocean. Instead, it will break down into smaller and smaller pieces.

"We need to understand where they accumulate around the New Zealand coast, what mediates their distribution and the potential environmental risks associated with microplastics."

She hopes data from her investigations will inform decision-makers and gauge microplastic environmental risk factors. She also wants to raise awareness about microplastics to the public and highlight any detrimental impacts they may have on our coastal systems,

economics and society as a whole. Julie's colleagues are investigating the ingestion of microplastics in mussels and local fish species, and the effects on freshwater systems, to gain a better understanding of this problem. They are also discussing citizen science projects with Sustainablecoastlines.org, which is rolling out a simple method to collect sediment samples, allowing a much larger database to be constructed.

"This will involve engaging schools and citizen scientists and we hope that sampling for microplastics can be part of current beach clean-ups and school programmes."

The funding for this research is from a philanthrophic donation to the Institute of Marine Science, without which this work would not be possible.

#### WOULD YOU LIKE TO **VOLUNTEER?**

Julie Hope is working alongside Alumni Relations Manager Joel Terwilliger, to help coordinate alumni, student and staff volunteers to gather samples in June 2019.

Through volunteering, our alumni, students and our wider university community around Auckland and New Zealand can make a contribution to answering big questions like "Can we improve our natural environment?"

To register your interest for volunteering opportunities like this, email alumnivolunteer@auckland.ac.nz.

# LALAVA

## PACIFIC PEOPLE AND THE UNIVERSITY OF AUCKLAND



oth universities and Pacific peoples face very challenging futures, and in large part they face them together," writes Associate Professor Damon Salesa, Director of Pacific Strategy and Engagement. These words form part of his introduction to this poetic and visually stunning volume: Lalava: Pacific People and the University of Auckland, for which he provides the spine around which the stories and images are woven.

Lalava is the powerful art of lashing together a building or a vessel using the braided cord of the coconut. This book takes its name from these lashings, and gathers poignant and powerful stories of how Pacific people and the University of Auckland came to be entwined. All its contributors are Pacific students, staff or alumni of the University.

"Like a mat being woven or a house being lashed, people and communities are knitted together. Like a mat, Pacific communities draw their strength from their meshwork of fibres rather than from any single one. Over the course of a lifetime, such work is never done. This

> is why throughout the Pacific there are proverbs that draw on different kinds of weaving or lashing, using them as metaphors, sayings and lyrics. They tell us of some deep truths about life and communities."

This book, a delight and a treasure for all readers – with a special appeal for our alumni and friends – covers the journey

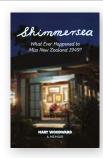
of how the University of Auckland became an increasingly Pacific university, a global leader in Pacific research and teaching, while becoming a home for thousands of Pacific students. This is a voyage with a deep history but one that is far from over.

The cover design, by Mike Crozier, takes its detail from the interior of the University's Fale Pasifika, shown in this illustration from the book (left).

Please email **pacificstrategy@ auckland.ac.nz** if you are interested in buying a copy of *Lalava*.









#### **DERRIDA DERIDED**

I was the one who believed in poetry – that it could capture the gull in flight and the opening flower and in the blink of an eye a knock on the door of death.

These are the words of Emeritus Professor C.K. Stead, whose new collection leads us deeply inside his life. In That Derrida Whom I Derided Died: Poems 2013-2017 he looks back at his younger self, remembering old loves and cringing at his 'lugubrious rhyming'. He writes of those who have gone (Jacques Derrida and Allen Curnow, Colin McCahon and Maurice Shadbolt, Lauris Edmond and Ted Hughes) but also of those still with us (Kevin Ireland, Fleur Adcock, Bill Manhire). The collection includes poems written while the author was Poet Laureate, including a sequence on World War I in which 'the Ministry' requests poems from our reluctant and sometimes defiant man of letters.

#### WHATEVER HAPPENED TO MISS NEW ZEALAND?

As a cash-strapped student recruited by the Lions Club and lured by prize money of 200 pounds, alumna Mary Woodward (BA, 1951) ended up becoming Miss New Zealand, 1949.

She describes herself as "short, with few pretensions to glamour", but others seem to have taken a different view; indeed she was seen in post-war Britain as a breath of fresh air, radiating charm and without pretension. "She's so natural," the British media proclaimed.

But that natural charm gave no protection from later tragedies, which she struggles to make sense of in her autobiography, Shimmersea: What Ever Happened to Miss New Zealand 1949? What makes this a remarkable book is her journey to "a place of acceptance ... without bitterness or regret".

Copies are available from Mary (Bobbie) Woodward, shimmersea28@gmail.com or (in eBook) from www.mebooks.co.nz.

#### **DIG UNCOVERS LP**

A 12-inch LP called Sweat in the Sun, Mate, produced in 1967, was discovered recently by the executive of the University's Auckland Archaeological Society in an exploration of the society's history. This was a collection of ballads and folk songs, created in memory of 1950s summer excavations in the Coromandel, recorded by the Fernfire Singers (Pat Sunde, Rudy Sunde and John Walton), with Garry Law and Sue Bulmer, and presented to prominent archaeologist Roger Green when he departed to take up a position in Hawai'i. This year, for its 50th anniversary, the society is re-releasing the LP as a CD, with permission from the original performers, composers and arrangers (or their next of kin), and with a new track written and recorded by talented society member and alumna Gala Morris. Dame Robin White has kindly given permission to reproduce her original cover art. The executive acknowledges the invaluable support of Garry Law, and the Archive of Māori and Pacific music. Order the CD, due out next month, from the Auckland Archaeological Society

#### **ECO-FICTION AT ITS FINEST**

(aklarchsoc@gmail.com).

Three activists let a photographer with a hazy past join their unorthodox household. As the scrappy crew takes to the streets in anti-war protests, the newcomer's secret threatens to destroy their alliances even as they are uncovering the biggest scoop in their careers.

Set in Portland, Oregon, in 2002, Parts Per Million throws a timely spotlight on recent US history, showing how individuals transform during social upheavals. This is the first novel of alumna Julia Stoops (BA, 1991), who was born in Samoa to New Zealand parents, grew up in Japan, Australia, New Zealand and Washington DC, and has lived in Portland since 1994.

Parts Per Million, a finalist for the PEN/ Bellwether Prize for Socially Engaged Fiction, was published in 2018 by Forest Avenue Press, Portland, Oregon.



#### FILMS TO WATCH FOR

Four films directed by alumni were in the line-up of full-length documentaries and features for this year's film festival.

#### THE HEART DANCES

For many of us, the photo above has an eerie echo of familiarity, evoking memories of Jane Campion's 1993 film The Piano, winner of the Palme d'Or at Cannes and of three Academy Awards.

In fact it's a scene from the Royal New Zealand Ballet's production of The Piano: the ballet, expanded from an earlier adaptation by Czech choreographer Jiří Bubeníček and his designer twin brother, Otto, both of whom are stars in the European world of dance.

In its turn, this scene appears in The



Heart Dances, the journey of The Piano: the ballet, directed by alumna Rebecca Tansley (MA1989; DIPBRC,1990). Other alumni in Rebecca's team include Flavio Villani (BMus (Hons),2011; MMus,2013), composer of part of the score. Cinematographer Simon Raby also studied at the University.

Rebecca and her team follow the brothers from Prague to Aotearoa and through the sometimes complex process of adapting to a new culture and learning the frame of reference needed to incorporate the Māori elements of the story in a way that is culturally appropriate.

Both the ballet and the relationships are at the heart of the story. "The arts are important," says Rebecca, "because they show us who and what we are."

#### **MAUI'S HOOK**

This moving and powerful documentary directed by Paora Joseph (BA,1995;

MA,1998; PGDipClinPsych,1998) takes us on a journey from Parihaka to Cape Reinga with the members of five families, each of which has lost someone close through suicide.

Also included is a young fictional character who observes the suffering and realises, too late, that though pain and anger can pass, death is permanent.

The film, designed to change attitudes and inspire action, is being taken to selected community venues around the country, supported by suicide prevention workshops.

#### PAUL CALLAGHAN: <u>DANCING</u> WITH ATOMS

Shirley Horrocks (BA,1973; MA,1975; DipDRama,1981; MBA,1987) explores the life of the late Paul Callaghan, physicist, science communicator and entrepreneur, as seen through the eyes of his brother Jim, classmates and colleagues, as well

as through earlier filmed interviews. We become familiar not only with his work at Massey and Victoria Universities and at the MacDiarmid Institute but also with his science-art collaborations and his passion for conservation.

#### **MEGA TIME SQUAD**

Tim van Dammen (BA,2004; MFA,2007), best-known for his exhilarating debut feature *Romeo and Juliet: A Love Song*, has followed it up with a new one described in the festival programme as an "utterly bonkers time-shifting crime caper set in the thriving metropolis of ... Thames".

A small-town criminal sent to rob the local triad acquires a mysterious bracelet that allows him to travel in time. The genre is action comedy, the mood is laconic and cinematic influences abound.

Look out for this one in the mainstream cinemas or anywhere you can find it.



Registration now open for 2019 Leadership Programmes

www.nzli.co.nz

