

THE UNIVERSITY OF AUCKLAND ALUMNI MAGAZINE

# Ingenio

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WINTER 2020  
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## GRASPING CHALLENGES

A LAND OF OPPORTUNITY  
IN A COVID-19 WORLD

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the spirit of resistance

### Raising entrepreneurs

How our future-focused  
graduates are thriving

### Boost your brain

Professor Cathy Stinear's  
seven tips to stay sharp

# BIG PICTURE





## *SPECIAL MOMENT*

Photographer Richard Ng captured Anahera Rawiri at the dawn blessing ceremony for the opening of the new Te Herenga Mātai Pūkaha/Engineering Building. The pou whenua was carved by master craftsman Delani Brown and sits at the Grafton Road entrance. Anahera's mother, Rangimarie Rawiri, runs Waipapa Marae.

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## Editorial

# A SENSE OF OPTIMISM



**K**ia ora koutou. It's my pleasure to welcome you to the Winter 2020 issue of *Ingenio*, dedicated to keeping our valued alumni engaged and informed about your university and each other.

It is no exaggeration to say much has happened in the past four months. While the times have been turbulent and dynamic, I am learning just how much there is to admire about the University and its people: staff, students, alumni and supporters. The 2021 QS World University Rankings accentuated this with the University's rise two places to 81st in the world, solidifying our position as New Zealand's highest-ranked university.

Recognition of those strengths and attributes comes also from other agencies. In 2019, Times Higher Education (THE) ranked the University of Auckland No. 1 in its first University Impact Rankings of 850 universities from 89 countries. In April, THE released its Impact Rankings for 2020 and the University of Auckland retained its top spot. The rankings are matched against the United Nations Sustainable Development Goals (SDGs). The University's performance is a fantastic achievement and a reflection of world-class work done by staff and students.

The Impact Rankings' focus on sustainability has become even more relevant as we consider what a post-Covid world might look like, and how the enforced 'pause' might be used as an opportunity to reshape economies in more sustainable ways.

There is a growing call for countries to use this crisis to radically rethink economic and social models. This includes concerns about increasing reliance on fragile global supply chains, dependence on single countries for essential manufacturing, precarious health systems, and placing too much emphasis on

economic growth that puts unsustainable pressure on the environment.

Against this backdrop, the focus of the SDGs on sustainability in its broadest sense has become even more important and relevant. The Impact Rankings demonstrate how universities, such as Auckland, can play a key role in thought leadership, germane research and sustainable operations. As a civic institution, it is in our remit to provide direction and leadership and to contribute to the solutions needed to weather the Covid-19 environment. What we do now matters. I am proud of all those contributing innovative solutions and services and inspirational ways to continue to deliver our core business – answering the challenge of taking teaching and learning online for our 40,000-plus students.

Without diminishing the difficulties we all face, and recognising the emotional and financial distress many are experiencing, I believe we can also have a sense of optimism. The future is not inherently dark. We have already seen innovation across a range of sectors. We see our own teams in health and medical sciences and in mathematical modelling respond, and the work around ethical decision-making and morality come to the fore – an integration of disciplines we might not have imagined in the past when we talked of artificial intelligence and automation. And our alumni, now 200,000 strong, have proved equally innovative, bringing skills and expertise to contribute to the civic good, building support networks of peers and providing practical, emotional and financial support to the University's staff and students.

As we work through the unpredictability of the coming months, I believe there are fantastic opportunities for us all. The future is here, and we are living it.

## PROFESSOR DAWN FRESHWATER

Vice-Chancellor



Cover design: Jacinda Torrance

Illustration: Nina Fox/Shutterstock

“Businesses must be convinced that their future prospects are good.”

– Professor Prasanna Gai, University of Auckland Business School

Professor Prasanna Gai says Covid-19 revealed the world’s over-reliance on suppliers located in China.  
Photo: Elise Manahan

# GRASPING CHALLENGES

## A LAND OF OPPORTUNITY IN A COVID-19 WORLD

By Gilbert Wong, Miranda Playfair, Margo White and Julianne Evans

Covid-19 will continue to change and challenge our economy, culture and society for years to come. But New Zealand has some real advantages as we move beyond the initial disruption and fallout from the pandemic.

**H**enry Kissinger, the former US Secretary of State, shared his pronouncement on the post-Covid-19 world in *The Wall Street Journal*. The influential diplomat said: “The pandemic has prompted an anachronism, a revival of the walled city in an age when prosperity depends on global trade and movement of people.” New Zealand faces precisely this

conundrum. As a small nation at the end of the world, with a limited internal economy, this country makes its living from global trade and the free movement of people. Yet to keep New Zealanders safe, it became a fortress with the Pacific and Tasman as its grand moats.

*Ingenio* looks at three of many areas hit hard during lockdown and beyond: the economy, the arts and the media.



## ◀ THE ECONOMY

**P**rasanna Gai, professor of macroeconomics at the University, has advised international banks on how to stress-test their banking systems, and reviewed monetary policy for our Reserve Bank. But, until now, he has never seen an economic crisis strike with such ferocity and speed.

Global GDP for the first quarter of 2020 dropped 20 percent. The World Trade Organisation expects global trading to contract by 33 percent, almost three times more than in the Global Financial Crisis (GFC) of 2009.

Prasanna does not dismiss comparisons to the Great Depression of the 1930s.

“This crisis is unusual in that it began with a problem in China and got magnified, quite deliberately, as a result of government lockdown policies. The global economic downturn that has unfolded hasn’t emanated from private choices, but as a result of governments choosing to lock down economies so health systems can cope.”

The scale of economic loss is unparalleled. The world’s major economy, the United States, is estimated to be bleeding \$137 billion a month or more, while New Zealand’s loss in GDP equates to a downturn of \$2 billion to \$5 billion a month. Faced with unprecedented contraction of economic activity, Prasanna believes the Government has little choice but to continue to intervene using fiscal policy as a stimulus.

“Packages in the form of wage subsidies, tax deferrals, state loans or grants for firms must be large enough to be credible. Businesses and households must be convinced that their future prospects are good,” he says. “The Government did attempt to tackle this in the Budget in May.”

But lack of confidence in the future can become a self-fulfilling prophecy and lead to a ‘doom loop’. As worried consumers spend less, business cuts back on investment, and productivity reduces further. The result is a negative feedback loop that amplifies the initial economic shock created by Covid-19.

“The onus must also be on the Government to provide a ‘lender of last resort’ facility. It chose to prioritise health, or short-term health, over the long-term consequences of the economy, with the view that they could sort out the economy later.”

If that sounds grim, there are positives. New Zealand’s sound economic fundamentals lessen the risk of a ‘doom loop’. If the Government has to become the lender of last resort to kick-start the economy, it does so knowing that there is ‘fiscal space’. Historically low interest rates suggest high levels of public debt are sustainable, reducing the cost to future generations.

New Zealand’s lifeblood comes from international trade, with the major sectors dairy and tourism. That lifeblood relies on supply

chains, the circulatory system of global trade. Although many supply chains have shuddered, just as many have rebounded. Our apples, milk and meat continue to find ready buyers in overseas markets. High-quality food will remain a strong part of New Zealand’s future.

Prasanna says Covid-19 revealed the world’s over-reliance on suppliers located in China. Around 300 of the world’s top 500 companies have facilities at ground zero, Wuhan. The lesson, he says, is that ‘just-in-time’ supply chains do not work in a crisis. The New Zealand economy also needs to diversify its supplier base, as a hedge against likely Covid-19 repercussions in countries we trade with, and build more robust supply chains.

Professor Tava Olsen, director of the Centre for Supply Chain Management at the Business School, says New Zealand needs to audit its stockpiles of essential items. The pandemic proved it was not enough to have agreements for supply when essential items faced global demand from countries with deeper pockets.

“Let’s ensure we are well prepared for any future emergencies. We’re living through a pandemic, but what about other scenarios, like war? What would we need if our borders were shut to goods as well as people? Are we self-sufficient enough?” she asks.

New Zealanders may never lack for food, but Tava says fuel reserves need serious review. “There should be larger reserves in Auckland. With oil so cheap, it’s a great time to rethink our fuel supplies.”

Her concern is for the myriad small to large manufacturers who had to shut up shop. They need to restart and be supported to restore a local manufacturing base. “After all, we won’t be earning tourism dollars for a long time.”

Colleague Dr Peter Zamborsky researches and teaches business strategy in the Faculty of Business. He says the lesson from Covid-19 is that New Zealand businesses need to master three core capabilities, the first of which is to refuse to duck uncertainty and instead to confront it.

“Don’t be paralysed by unpredictability.”

He recommends building at least four scenarios for different time horizons. Forget five-year plans and instead set up a ‘plan ahead’ team to focus on the long term. Be agile, move fast.

Second, settle on ways to drive the market.

“The most important of the strategic initiatives are the ‘no-regret’ moves that benefit the company in any scenario. This might mean initiating e-commerce and digital products, as consumer behaviour shifts to reshape the ‘at-home economy’.”

Finally, he says, businesses need to be prepared to transform to match what can be predicted about their sector.

“Many companies have had to retrench or restructure, such as Air New Zealand, where new



Professor Tava Olsen says New Zealand needs to audit its stockpiles of essential items.



Associate Professor Peter Shand, head of Elam School of Fine Arts, says Covid-19 brought the arts into focus.

CEO Greg Foran made it clear the company would emerge from the crisis as a domestically focused airline with a strong international cargo component.”

Like many, he hopes that economic stimulus packages from governments across the world will reduce the risk of global recession over multiple years. As Covid-19 reshapes business and trade, there will be new winners and losers. Some trends, such as the rise of digital giants from Google to Alibaba, will continue. Other possibilities, he says, are a time of bigger government, a more frugal economy and the decline or rethinking of global supply chains in a downshifted global economy.

## THE CREATIVE ARTS

Other sectors important to our way of life have seen the pandemic have a devastating impact. For the creative arts, it's also been a reminder of how art inoculates us against the most difficult times. Galleries, museums and cinemas were closed, concerts and festivals cancelled including the Auckland Arts Festival, the Auckland Writers Festival and, for the first time in its 32-year history, WOW (World of Wearable Art).

The social, psychological and economic cost on the professional creative arts sector has yet to be revealed, and safe to say it won't be pretty. Yet history shows us that art has a way of responding to adversity following war, economic depression and pandemics. We turn to science to develop a vaccine to protect us from the virus, but to art as an emotional and social antidote.

The creative arts sector rose to the occasion in, well, the most creative ways. Galleries offered virtual tours of their collections; museums invited people to contribute to and curate online exhibitions; theatrical, dance and orchestral performances were streamed online as was the New Zealand International Film Festival and the Auckland Art Fair. Professor Paula Morris (Faculty of Arts) hosted an online version of the Auckland Writers Festival in May, and the Ockham Book Awards were livestreamed.

What was also remarkable, says Associate Professor Ralph Buck, head of the Dance Studies Programme, was the way being locked down unleashed a creative spirit in us.

“I've never seen so much creativity in the public media,” he says, pointing to stories on TV news, radio and social media platforms such as YouTube and TikTok. ▶



Dr Peter Zamborsky says businesses need to transform to match what can be predicted about their sector.

## Business School lends a hand to business

Not long after lockdown was announced, experts in the Business School were looking for ways to help New Zealand businesses. Then requests for assistance started coming in, highlighting the challenges faced in every business from exporting to human resources.

At first, staff provided one-on-one advice on the phone or through online video platforms but demand grew. Dr Antje Fiedler, a senior lecturer at the Graduate School of Management, then helped set up a pro-bono business advisory group, with staff offering advice.

“Initially we established the pro bono group to give business consultancy advice utilising our expertise, then we set up webinars so more people could join. Our first featured Cristiano Bellavitis, senior lecturer in innovation and entrepreneurship, who covered the likes of entrepreneurial finance and cashflow projections. Dr Deepika Jindal covered aspects of human resource management.”

At the time of writing, the group was also looking at holding seminars to assist with improving business online, and connecting consumers through digital platforms.

“Where we don't have the answers, we refer them to other platforms such as Export New Zealand or the Employers and Manufacturers' Association.”

Antje says some businesses are also collaborating with students.

“There have been a couple that weren't quite right for us to assist but we looked for other options to get them support. At least one Masters in International Business student now has a project out of it.

“We're not claiming we are necessarily the experts, as we're all still learning ourselves in this situation. But we can share some best practices, tips and common issues to tackle these challenges and think collectively.”

Associate Professor Ralph Buck, head of Dance Studies, says lockdown unleashed creativity.



## Lockdown jazz

Many musicians have given live performances in lockdown, some raw and ready, others polished and poised. Miles Boermans, pictured, is in his first year of a Bachelor of Music in Jazz Performance and during Lockdown Level 4, he loaded a performance a day on Vimeo, in what he called The Lockdown Sessions. Miles' dad Folko Boermans is Creative Director in the Media Productions unit so put his talents to work to help showcase his son's talent. See Miles' 33 piano performances from around his suburb at [vimeo.com/showcase/6948189](https://vimeo.com/showcase/6948189)



◀ “Skits of fathers dancing with their daughters, or creating works using materials found around the house.”

This was partly the result of parents being obliged to find new ways to keep the kids busy and upbeat. “Children are big on play, which in turn encourages parents to relax a bit and let their imaginations go for it.”

Associate Professor Peter Shand, head of Elam School of Fine Arts, also points to unexpected expressions of creativity. These included examples of art-making that people shared with an unknown public. “So it was a real shift in what it is that creative endeavour can achieve, and what we might expect for ourselves after lockdown. The arts have always been important to us, but Covid-19 brought that back into focus.

“But if you’re talking about people going to formal institutions, such as the symphony orchestra or art galleries, Covid-19 was terrible for the arts, because they were all closed.”

There will be ongoing concerns about public gatherings, and we may need to revise how we participate in the creative arts, but Peter believes online viewing, a novelty in lockdown, is unlikely to replace the bricks-and-mortar art gallery.

“Looking at an artwork online can never replicate the experience of walking around a sculpture or standing in front of a painting. Looking at artworks is never just about looking.”

There is good reason to believe that having turned to the creative arts in a time of crisis, we have been reminded of their importance, which will reinvigorate our participation, making us keener to head to galleries, festivals, ballet et al.

“It won’t happen for a while but it will happen,” says Ralph. “I’m going to predict that people are going to go to them more than

ever. During the Great Depression, cinemas and theatres collapsed and everyone said, ‘there goes Broadway’, but straight after the Depression, attendance in cinemas and theatre skyrocketed. People wanted to enjoy the arts in a collective manner.”

The craving for the collective experience was exemplified in *One World: Together at Home*, the eight-hour live-streamed benefit concert. On a smaller scale, local musicians including Neil Finn, Dave Dobbyn and Tiki Taane, put on free online concerts through telcos Spark and Vodafone. Covid-19 also prompted budding musicians to share their music online (see sidebar, page 10) at a time when viewers had time to try something new.

Dr Marie Ross, lecturer at the School of Music and specialist in historical clarinet and early music, has used an online platform for six years. Her podcast series *Fidelio*, set up in 2014, features interviews with different kinds of artists from a range of backgrounds.

“It’s something that followed me from my full-time freelance life in Europe to my life now.”

She says harnessing contemporary technologies is crucial for any musician in the 21st century.



Dr Marie Ross:  
“It’s difficult to play  
to nobody from  
your lounge.”

# “I’ve never seen so much creativity in the public media.”

– Associate Professor Ralph Buck, head of the Dance Studies programme

“These platforms existed before Covid-19, but I think it has highlighted to musicians just how valuable they are to connect with a wider audience and other musicians around the world.”

She’s also optimistic that the lockdown may have reminded us of the pleasures and joys of the shared live experience, too. “From a musician’s point of view it’s really difficult to play to nobody from your lounge, and from an audience point of view, digital video is never going to sound anything like listening to a live performance.

“I hope there might be a new appreciation for the true sound of a live performance, for the live interaction between musicians, and between the audience and performers – as well as the energy generated in a live performance.”

The creative arts have helped us articulate what is unique about these times, when we didn’t have the words for them. “I’ve never danced so much with my children than I have during lockdown,” says Sarah Foster-Sproull, senior lecturer in Dance Studies, choreographer and Artistic Director of Foster Group Dance.

“However, when we move out of lockdown, artists in Aotearoa will need resilient, sustainable and meaningful financial support. Some artist friends I’ve spoken to are concerned that the Covid-19 pandemic will impact the arts in Aotearoa forever. It will, and it already has. But we, as a country, now have the unprecedented opportunity to rebuild our arts community in ways that more meaningfully represent us.

“We can all go and think about that, as we watch *What We Do in the Shadows*, while reading Eleanor Catton’s *The Luminaries* and dancing wildly to Aldous Harding.”

## THE MEDIA

As Covid-19 spread around the world, so did 24-hour media coverage of the story. But while fast and factual news was never more crucial, it was delivered in a landscape in which advertising revenue had collapsed, newsrooms had been depleted and hundreds, if not thousands, of media jobs in New Zealand were on the line or already gone.

Professor Annie Goldson, who teaches journalism and documentary filmmaking in the Faculty of Arts, believes the industry’s woes predated the virus. She says if it’s going to survive beyond Covid-19, it needs to look at different economic models and decide what’s important.

“Especially if you think about German-owned Bauer pulling out of the market and taking a magazine like the *New Zealand Listener* and many others, with it, that’s pretty tragic for our cultural history,” she says. “If we can find any lessons, one might be we shouldn’t make ourselves so vulnerable to that kind of decision when it comes to things that are culturally very important to us.”

Neal Curtis, an associate professor in media and communication, agrees. “This is the result of the processes of globalisation, where we squeeze the local, which becomes subsumed by the transnational, and then the local has no defence when the transnational makes a decision.”

Lessons may well emerge from Sinead Boucher’s purchase of New Zealand’s largest news website. Boucher, the CEO, paid \$1 to buy *Stuff*, which has a large regional footprint, from its Australian owners Nine Entertainment and is floating the idea of giving staff a shareholding stake in *Stuff*. Policy makers and the public have responded positively to having a major news source owned by New Zealanders again.

Neal and Annie still have concerns about commercial broadcasters such as MediaWorks (owned by US-based Oaktree Capital Management) looking for financial support from the \$50 million media rescue package announced by Broadcasting Minister Kris Faafoi in April.

But the live broadcast platform is still a vital source of information in a national crisis. The popularity of the 1pm Prime Minister’s press conferences on TVNZ and TV3, and online, showed traditional media still plays a part in people’s lives. The ratings for the 7 May announcement that the country would soon move to Level 2 showed 661,800 people aged 5+ tuned in, not counting livestream.

Faafoi did announce the Government would cut the transmission fees television broadcasters usually pay, for six months, saving them about \$21 million in total. Whether that’s enough to get MediaWorks through – still looking for a buyer at press time – remains to be seen.

“Obviously we also need media and journalism outlets outside the government-funded ones to hold power to account,” says Annie. “That should be fundamental to robust journalism. It’s also important to support regional coverage that has suffered over the past decade.

“Whereas most outlets produce some good journalism, the profit motive of corporate media can lead to an increased presence of clickbait opinion pieces and ‘reckons’ based on very little expertise or research. Those items are cheap to ▶



Sarah Foster-Sproull, senior lecturer in Dance Studies, says she’s never danced so much with her children as she did during lockdown.



Professor Annie Goldson:  
“When you’re staring  
death in the face, you want  
information and expert  
opinions.”

◀ produce and garner a lot of heat and light. We need to be careful about what we’re funding.”

She thinks government money could be well spent on media outlets that are already engaging successfully with the online environment and are New Zealand-owned. “Online, *The Spinoff* and *Newsroom* seem responsive to providing coverage pertinent to Māori and underserved communities. They also have a strong subscriber base, meaning they have loyal audiences so they’re a solid, far-sighted investment.

“Then there are outlets such as iwi radio and TV programmes such as *The Hui* ... we need to be sure they also receive funding and support.”

As well as Māori media outlets, Neal believes it comes down to whether the Government decides local quality production and independent journalism is worth supporting: “That’s sites for the citizenry, not linked to large international corporations that are only in it for profit.”

Niche options are even tied to the University: Dr Maria Armoudian’s *The Big Q* ([bigq.org](http://bigq.org)) uses academic expertise in long-form articles and opinion pieces and *The Challenge* ([auckland.ac.nz/The-Challenge](http://auckland.ac.nz/The-Challenge)) runs in-depth features about research tackling challenges facing New Zealand.

For mass media, Neal says paywalls aren’t necessarily a solution. “If content goes behind a paywall, most people then can’t access it, so what they’re left with is the open-access content, with websites that promote all kinds of stories, scandal and conspiracy theories. Keeping local, pro-citizen journalism open access is so important.”

In the UK, *The Guardian* is an example of a media organisation staying open-access through a mixed model of an endowment trust, key sponsors and ‘partners’, and subscriptions.

“It has been particularly successful because it adapted to the online environment early and has the advantage of a mass readership,” says Annie.

“It’s also worth noting that *The Guardian* has

opened an Australian and New Zealand office so when you go to its web page from here, it will also give you local news,” says Neal.

He believes that’s a genius idea. “They’ve also realised that lots of people would actually like to publish in *The Guardian*, so they opened up a section for articles by academics and other experts which provides them with free, sometimes institutionally subsidised, high-quality content, as have *Newsroom*, *The Spinoff* and *The Conversation*.”

He says tech giants Facebook and Google can take much of the blame for sucking away local advertising and should be compelled to give something back.

Annie agrees. “Australia is asking for a percentage of the commercial profits that Facebook and Google make, and that’s a model we should try, perhaps in partnership with Australia to give us more weight. We can’t force them, but since the Christchurch massacre and debates around live-streaming, I do think we’ve gained some moral high ground in that area.”

“We have to convince Facebook that they don’t want to kill the goose that laid the golden egg,” says Neal. “They have a profoundly parasitic relationship to journalism and most parasitic relationships are based on keeping the host alive.”

He says the news media will adapt and survive in a new, and hopefully improved, form.

“The way I hope it does that is to go local. Local production with a regional and national focus, and an international perspective.”

Both agree the future is not all bleak, and Covid-19 has highlighted the media’s role in a national emergency.

“What we’ve seen since Covid,” says Annie, “is that when you’re staring death in the face, you want information and a range of expert opinions. The media will also be involved on that front, because that’s the vehicle through which most people can access information and knowledge.” ■

# FADE TO BLACK

The meeting was via Zoom and short notice. The nation, and large swathes of the rest of the world, was in the Covid-19 lockdown. Self-isolation as a mass undertaking turns out to be strangely absorbing, like some arcane spiritual practice where you sit atop a pillar or self-flagellate or just hole up in your house for weeks, offering up baked burnt offerings to dangerous gods.

Busy trying to flatten the curve of a rampaging pandemic, we didn't see the truck coming that was about to flatten us and almost the entire local magazine industry, as Bauer Media New Zealand took the opportunity presented by magazines being declared non-essential during the lockdown to pull the plug.

The *New Zealand Listener*, *North and South*, *Metro*, *The Woman's Weekly*... It was one of those moments when you are actively aware of failing to believe the evidence of your own ears. The manager had us muted or he would have been deafened by the roar of a couple of hundred people going "F---, f---, f---".

The *Listener* last year celebrated its 80th anniversary. It was my professional home for 36 of those years, a run that ended in a rolling media meltdown including, a week later, NZME laying off 200 staff. My time at the magazine began as farce. I had been tutoring in the University's English Department, working with people who had been mates with Frank Sargeson, Janet Frame, James K. Baxter – the great New Zealand writers. Some – C. K. Stead, Bill Pearson – were the great New Zealand writers. In 1984, despite the fact that I knew nothing about journalism and couldn't type, I got a job as television writer for a big, floppy, inky national institution. I went around for days in dark glasses, panic stricken. "What's wrong with you?" people asked. "I'm going to work at the *Listener*," I wailed. They looked at me as if I were mad.

Decades with the best: Helen Paske, Steve Braunias, Bruce Ansley, Geoff Chapple, Tom McWilliams, Alison Mudford, Finlay Macdonald, Tony Reid, Margo White, Philip Matthews, Rebecca Macfie, Donna Chisholm, Fiona Rae and more. You would head off to interview Bruno Lawrence or Elisabeth Kübler-Ross or 80s yuppies at play, with photographers like Jane Ussher, Robin Morrison and John Reynolds. Our Auckland High Street outpost had legendary

Christmas parties attended by all manner of artists, writers and blagueurs. Formidable advertising manager Flo Wilson had to fend off would-be advertisers.

It was less another world, more a glittering galaxy far, far away. Though it's deceptive to think in terms of golden ages. There was more time for serious journalism and space for a range of voices from all ends of the political spectrum, but always a substantial word count for the trivia and crap that rules our lives. A cover could be David Lange or a *Doctor Who* dalek. I interviewed Oliver Sacks. I interviewed Mike Hosking. Sublime and not infrequently ridiculous.

Nostalgia gets you nowhere amid the terrifying implosion of the media, which, for all its infuriating failings, is an essential service in any functioning democracy. Still, nothing ever turns out exactly as predicted. Everything I love to write about – books, television, radio, movies – has at one time been declared in an extinction crisis. All are still here and, in the case of television, never better.

And everywhere now, even during lockdown, there has been a valiant, unfettered creativity, a determination to cut new cultural channels, to keep going. When almost everything went dark, people did things differently. Our kids made children's television content on their phones, shot ads in their kitchens, studied and researched for the new world still out of sight. As I write, my partner, his colleagues and readers are working to keep the magazine he edits, *Architecture NZ*, 70 years old and counting, alive.

New ideas to keep journalism afloat land in my inbox or spring up online. "It is something where there might otherwise be nothing," one journalist said about his plans to continue doing what he does for the love of doing it. We saw this sort of spirit after the Christchurch earthquakes: resilient, hopeful, generous. It's the spirit of resistance. Whatever comes next, it should not be allowed to slip away.



Image: Courtesy of the Alexander Turnbull Library

#### About the writer:

Diana Wichtel (MA, English) tutored English literature at the University, 1981-84. She is an award-winning feature writer, reviewer and author of *Driving to Treblinka: A Long Search for a Lost Father* (AWA Press), which won best non-fiction book at the 2017 Ockham New Zealand Book Awards.



*When it comes to healthcare*  
**LET'S FOCUS  
ON SCIENCE**

Kris Vette has dealt with challenges caused by a pandemic before. He says the problem with the Covid-19 pandemic is that we haven't learnt many lessons from the past.

**W**idespread pandemics have hit civilisation about once every 80 years or so since ancient times. The first recorded pandemic, the Plague of Athens, occurred around 426 BCE. In December 2019, as if to mark the centenary of the devastating 1918 'flu pandemic, a 'pneumonia of unknown origin' emerged in central China.

Despite warnings from prominent figures and scientists over the past decade, most countries had made little progress with pandemic preparedness and there were almost no vaccine platforms (building block vaccines) in place that would have allowed rapid vaccine development from previously advanced work. Adding to these failures, the outbreak was downplayed by many commentators. The opportunity to 'spool-up' organised responses in those first couple of months was lost.

New Zealand is fortunate in having a public health specialist as Director-General of Health and Dr Ashley Bloomfield was able to take effective

steps here. The first aim for any country is to limit demand on intensive-care beds and hospitals. Ten years ago, the world faced the H1N1 Swine Flu pandemic. Then, New Zealand had no prior warning and we became the second country in the world to have an outbreak. We responded well, but unlike the current virus, the disease was short-lived. After three months everyone packed up and there was little follow-up in terms of 'lessons learnt' to prepare for the next one.

As most people know by now, the Covid-19 pandemic is caused by the SARS CoV-2 virus, part of a wider family of coronaviruses that cause about 30 percent of common colds. SARS CoV-2 is more deadly as it is novel (new) to humans. It has jumped species recently and is likely to have originated in bats, so it is unrecognised by our immune systems. Most human viruses at some point in the past have jumped species from other animal hosts. Some are even older than humans. For instance, using phylogenetic trees, it has been possible to trace the herpes virus back

to dinosaurs, 200 million years ago. To survive a previously unseen pathogen, humans rely heavily on their first-response immune system. That 'innate system' provides a general response to any threat. After a few days the 'adaptive immune system' revs up. That system develops specific antibodies and T-Cells to make a more targeted attack. While this goes on, we usually feel 'dreadful' as our body's own cytokines fight a battle with the virus and our infected cells. Usually we recover. Then our immune system will hold 'memory' to that virus and we get some durable immunity.

Eventually, these novel viruses end up merging into the common pool of human viruses, but it takes years. Over time, a virus will usually evolve to become less lethal in order to survive. The only evolutionary aim for a virus is to spread. If it kills off its host too quickly, there will usually be only a short epidemic, and it won't be spread far and wide.

The Covid-19 virus seems well adapted to spread. Its ability to transmit is defined by a 'basic reproductive number', known as  $R(0)$ . The  $R(0)$  for this virus is probably 2.5. That means it infects 2.5 other people from each infected person. It also has a mortality rate of somewhere around 1 percent and appears to be infectious for two or three days before symptoms occur.

These quantifiers can be applied to any virus. The seasonal 'flu has an  $R(0)$  of 1.2. The 1918 'flu had an  $R(0)$  of 1.8. So Covid-19, with an  $R(0)$  of around 2.5, gives us a virus that is highly transmittable. It kills only a small percentage of those it infects, but it infects a lot of people.

**A**t the time of writing, a vaccine was some way off. Possibly we would get a treatment before a vaccine. But treatments are never 100 percent effective. A number of candidate drugs are being trialled, including antivirals used for HIV and SARS-1. One promising treatment was actually used in the 1918 pandemic. Known as 'convalescent sera', it takes serum from recovered patients and injects the antibodies into patients. Trials were ongoing when this deadline arrived.

Until an effective vaccine or drug is found, the goal remains to reduce the spread so that each infected person infects less than one other. Surprisingly, the tools we have to do this are the age-old, tried and true, public health measures such as handwashing, physical distancing, face masks and outbreak isolation. If we were effective in doing this, it is possible that we could have low levels of the virus in the population with only a few outbreaks here and there. Critically, health system capacity could cope with that.

As we emerge from this event, we must



remain mindful that these cross-species viral 'spill-over' events are happening at an increased rate. In the past 30 years we have had HIV, Zika virus, SARS-1, Ebola, MERS, H1N1 Swine Flu, and now this devastating SARS CoV-2. The increasing number of viruses crossing over to the human population may be related to deforestation and population growth, bringing wild animals into closer contact with humans.

When the dust settles, it is likely we will have seen many trillion dollars wiped out of the global economy. The lesson we must learn is that an ounce of prevention will allow us to respond effectively next time. Scientists should be listened to and science needs to play a more prominent role in education and government. Significant tools were available to us to prevent this pandemic, but few were put in place.

Surveillance for emergent pathogens, prepared vaccine platforms, protocols, training, PPE stocks, integrated health IT systems and patient-owned health records are needed. Systemic fragility is caused by running healthcare with a short-term focus. Resilience for crisis events needs to be measured. These need not be 'black swan' events.

This won't be the last malevolent threat we face. We need to be more creative in our thinking. Systemic resilience, adaptive organisation and a focus on science are intelligent ways to protect civilisation.

*Kris Vette says science needs to play a more prominent role in education and government.*

**Kris Vette** has a BSc (Physiology) from the University and also has a M.Phil and Postgraduate Diploma in Business Admin. He was involved in the SARS-1 pandemic response in 2002 while managing infectious diseases at St George's Hospital, London. In 2009, he managed the border during the H1N1 pandemic in New Zealand. He now runs a Healthcare Emerging Technology consultancy. [kris@chainecosystems.com](mailto:kris@chainecosystems.com)



## Q & A WITH DR ASHLEY BLOOMFIELD

Alumnus Dr Ashley Bloomfield has become a household name for his work in helping “crush the curve”.

### **What helped you in this important role?**

I have great confidence in the people I work with. Coming into the Ministry I was able to build a great team and we’ve spent time learning about each other and how we can fulfil our potential not just as individual leaders but as a team. As each ‘curve ball’ arrived, the value of that investment has shown, as New Zealand faced its greatest challenge in decades. The intensity and pace of the response was hugely challenging. We had to provide advice to inform major decisions with incomplete information and in a rapidly evolving situation. It’s unlike anything you can plan for.

### **How did you develop communication skills?**

I’ve always quite enjoyed public speaking, and like to watch good speakers and learn from them. I also tuck away phrases and quotes that help to tell a story clearly. Like all skills though, practice makes perfect. The format of the daily TV stand-ups – providing up-to-date, clear and transparent information – really resonated with people. It did require good preparation and focus, so I relished the odd day when I got a break.

### **Who has the most influence in a pandemic, the government or Director-General of Health?**

The government ultimately makes the big decisions. But the Director-General role has significant statutory powers and some of these were exercised for the first time ever. It was a notice issued by the DG that provided the legal basis for isolating all incoming travellers, restrictions on gathering size, requiring people to stay at home and other measures under Alert Level 4.

### **Were we well prepared for this pandemic?**

Yes, we had an up-to-date pandemic plan that had been tested and a range of other measures in place. But we also had to adapt and adjust very quickly as we saw what was happening in other countries and as the scientific evidence started

to emerge. So, you can have a good plan but it’s no replacement for good advice, rapid decision-making and good governance.

### **You’re a specialist in non-communicable diseases (NCDs). When did you move into communicable diseases?**

NCDs is still my area of interest and expertise, but public health training also involves managing communicable diseases. With the measles outbreak in 2019, I was able to draw on my experience as a public health medicine registrar at Auckland Regional Public Health Service when the previous big measles outbreak occurred there. The core science of public health is epidemiology, which is relevant whatever the disease.

### **What drew you to a role in public health?**

Partly a process of elimination, partly interest in the core concepts. Once I had started my Masters in Public Health at Auckland, I found my eyes opened to many different ways of looking at society and health; that got me hooked.

### **Did you enjoy your time at the University?**

Greatly. After three years at medical school, I took a year off to travel. I came back refreshed and joined another year group, so I have two cohorts of medical school friends – including my (now) wife Libby who was in the year group I joined after the break. I’m still in touch with them through work and outside of work.

### **You spent time working for the WHO as a partnerships adviser. What did that involve?**

I had a fantastic year at the WHO in Geneva in 2011 working on NCDs and we were living just across the border in France. The work environment was completely different from New Zealand and I learned a lot of new skills – including international diplomacy. Our family has very fond memories of the time there.

### **In a ‘normal’ situation, what are your preferred past-times?**

My No 1 relaxation activity is spending time at our bach in St Arnaud (Lake Rotoiti). As a family we enjoy New Zealand’s fantastic wilderness as often as possible whether it’s skiing, tramping or biking. I have a group of local friends I’ve mountain biked with for many years and, in addition to our local rides, we get away a couple of times a year for a trip.

### **What have you taken out of this experience?**

At a health forum we convened last year, I heard the best-ever definition of leadership from one of the disability advocates who presented: “Leadership is an invitation to collective action.” I simply can’t think of a time and place where this is more relevant.



Ashley’s face also appeared on ‘Curve Crusher’ merchandise designed by The Bold and sold as part of the [theprintroom.nz](http://theprintroom.nz) campaign to raise funds for Women’s Refuge.

# LONG-TERM THINKING

With the world having been enveloped by the Covid-19 pandemic, informed long-term thinking has never been more crucial, writes Sir Peter Gluckman.

**W**hile pandemics are inevitable and acute, many other challenges are predictable even if they emerge more slowly.

In the diverse roles I have been privileged to hold, I have seen how a short-term focus for policymaking can interfere with finding solutions to tackle issues with long-term horizons. Societies have difficulty in reaching consensus on complex issues where knowledge, cross-disciplinary expertise and contested values collide. This is demonstrated by the challenge of making progress on sustainability and human-centred development agendas as outlined, for example, in the United Nations Sustainable Development Goals (SDGs).

Even without the added burden of Covid-19, we face an unprecedented time in human history. The negative impact of humans on the planet has become undeniable. Pervasive and disruptive technologies impact on every aspect of the human condition and our institutions; the ways we relate to each other are fundamentally changed by the digital world; demographic change is profound; lifestyles and expectations have changed; mental health issues are rising, especially for young people; and psychological resilience is challenged.

Societies face tough questions. The right solutions require us to transcend partisan politics and the political cycle. We need to find ways to genuinely engage citizens because the current methods of community consultation are not truly representative. Trust surveys indicate that citizens across the Western world have declining faith in governments to solve their problems. The creation of Koi Tū: The Centre for Informed Futures ([informedfutures.org](http://informedfutures.org)) this year aims to help address some of the tough questions. We are a novel enterprise for a New Zealand university – an independent, apolitical think tank focused on challenges of national and global concern. Academia has a crucial role in this to explore societal and individual resilience in the face of rapid change, developing integrated knowledge for decision making by communities and policymakers in a post-truth world, understanding impacts of rapidly emerging technologies, and identifying the trade-offs embedded within the sustainability agenda.

We must also face the challenges of the misinformation age. Inconvenient truths are labelled ‘fake news’, and scientifically established facts contested and too often manipulated for purposes that undermine democracy. We have seen how this has impeded actions needed in some countries in dealing with Covid-19.



While much of society’s focus had to be on the acute phase of the pandemic, we are thinking now about the recovery and the longer-term challenges. Will we learn from it, and will it lead to big changes in how we operate? Or will we revert to type and wait for the next crisis?

The pandemic has accelerated our need for deep thinking and conversation on many of the issues and Koi Tū has initiated a wide range of discussion papers on how New Zealand might respond to the reset opportunities created by this global event.

More broadly we are working with UN agencies and academic centres globally on how we might get a better understanding of human-centred development, societal cohesion and resilience. We have co-led an international effort to develop a process and toolkit to assist policymakers in making effective choices to achieve the transformations necessary for faster progress on the Sustainable Development Goals. As you will be aware, the University retained its No 1 ranking in the Times Higher Education University Impact Rankings in April, indicating as an institution we are leading the way.

An important part of the Centre’s activities involves true engagement with civil society, policymakers and the private sector as partners, and to engage the full range of knowledge disciplines. From the outset, beyond our overall goal of battling the misinformation age, we will avoid partisan and short-term issues to focus on longer-term issues that challenge our future.

**About the writer:**

Distinguished Professor Sir Peter Gluckman is director of Koi Tū, Chair of the International Network of Government Science Advice, President-Elect of the International Science Council and former Chief Science Advisor to the Prime Minister. He is also a former director of the Liggins Institute and former Dean of the Faculty of Medical and Health Sciences.



## AUCKLAND BECOMES A HUB

### University becomes international hub for quality education goal

With Auckland retaining its top spot in the Times Higher Education (THE) University Impact Rankings in 2020, the quality of the University's education has been recognised again. The Impact Rankings show how universities worldwide are performing against the United Nations' 17 Sustainable Development Goals (SDGs) and aren't just about sustainability in its best-known sense.

The goals include health and well-being, work

and economic growth, gender equality and quality education.

Auckland has also been appointed as one of only 17 universities in the world to become a 'hub' for the SDGs in the UN Academic Impact (UNAI) group, taking responsibility for SDG 4 (Quality Education). Our hub will head a group of 1,300 UNAI member institutions (academicimpact.un.org) in around 130 countries on ideas to achieve the 17 goals.

Our community is well on board. In March, 80 students from Aorere College in South Auckland took part in the launch of the philanthropically funded Buchanan Programme for UE Success.

"The programme is based on everything we've learnt about what will make the most educational difference for these students who have so much potential, but might lack opportunities," says University senior analyst Victoria Cockle.

The programme 'buys out' a portion of a teacher's time to provide each student with an academic mentor and advocate, as well as pastoral care support. There's also extra tutoring in core subjects such as English, maths and science, and mentoring by students who are now successfully engaged in tertiary study.

See: [auckland.ac.nz/about-the-SDGs](https://auckland.ac.nz/about-the-SDGs) and [auckland.ac.nz/buchanan-success](https://auckland.ac.nz/buchanan-success)

The Buchanan Programme supports promising students to pursue tertiary study. This Aorere College student was one of 80 taking part in a two-day camp in early March.

## GOOD THINGS WILL COME

Top scholarship winners must wait to study overseas for now

Two doctoral students who won prestigious scholarships to head to Stanford University and the Massachusetts Institute of Technology (MIT) must play the waiting game.

Kate MacKrill, doing a PhD in psychology, and Emily Lam Po Tang, a PhD researcher studying heart muscle function at the Auckland Bioengineering Institute (ABI), both won Andrew Bagnall Doctoral Student International Mobility Scholarships in February. But due to Covid-19, mobility has been a challenge. Kate did manage a trip to Stanford with a group of Auckland researchers collaborating with Stanford's psychology department, arriving home not long before Covid-19 forced the closure of borders.

"It was an amazing opportunity," says Kate, whose thesis is on the placebo effect. "Our labs do similar research, so we had fruitful discussions that sparked new ideas. It was great to get to know the Stanford researchers and gain some new collaborators for future research projects."

She says part of her research also turned out to be timely in light of the pandemic.

"My PhD investigates the effect of symptom-tracking apps on symptom reporting. We had developed a new scale that measures people's beliefs about the cause of symptoms. After presenting my research, Stanford are now using the symptom scale for a study they're conducting to investigate people's perceptions of Covid-19."

Kate was due to attend another event in London which has been postponed until 2021, along with her other overseas research events. "Ironically it was a meeting on health scares."

Emily will need to wait to take up her research work at MIT, but was due to hear more mid-year. "It's unfortunate, but I am still planning to take the trip to MIT when the situation gets better and we are allowed to travel again."

Kate MacKrill at Stanford University in February as part of her Andrew Bagnall Scholarship.



# THE PRIDE OF GRAFTON ROAD

The purpose-built Engineering Building impresses in early months

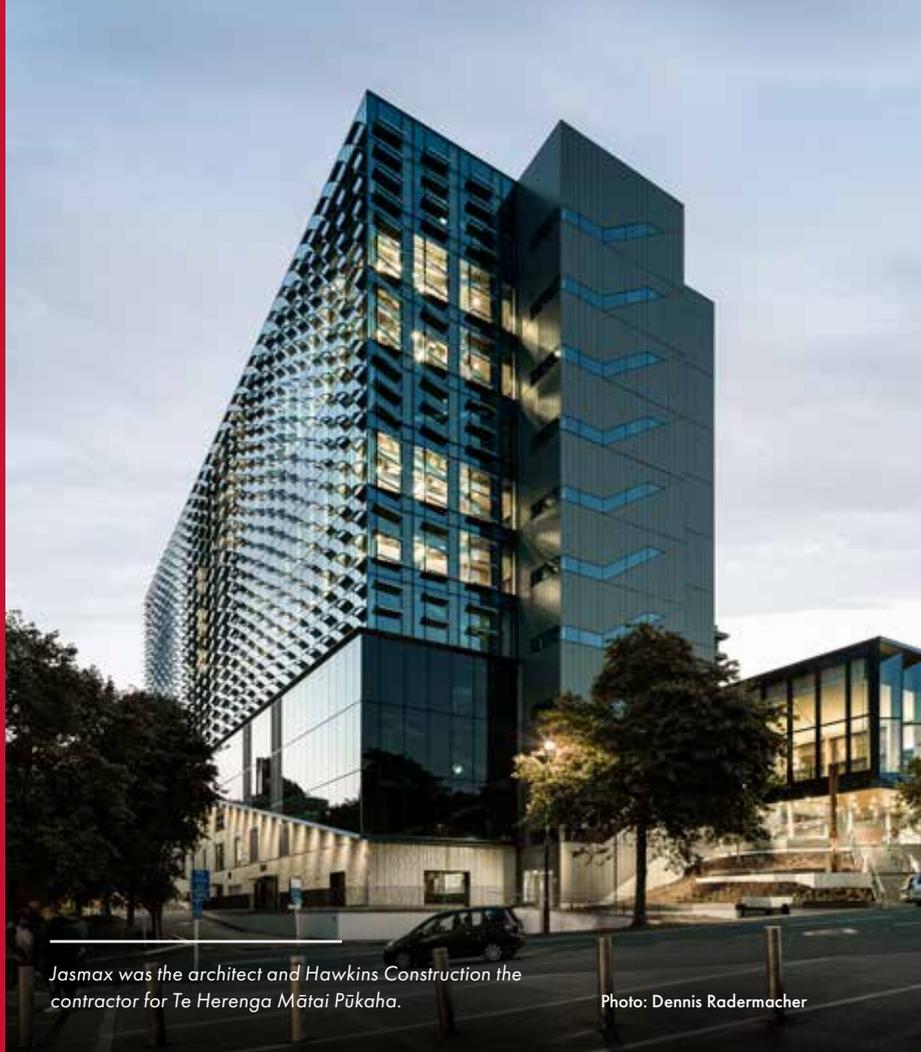
**A**fter several months moving all the people and more than 10,000 pieces of equipment into the new \$280m Engineering Building on the City Campus, Semester One 2020 saw staff and students get to experience a structure five years in the making. Albeit briefly, thanks to lockdown.

"It was a fantastic feeling," says building programme coordinator Mike Renwick. "It has such impressive world-class flexible teaching spaces and complex research labs for the faculty's staff, researchers and the future engineers of New Zealand."

In those first few days, he spent some time checking all was working as planned.

"It was so pleasing to hear the great feedback and realise we had delivered this fantastic new facility, and on time."

Read more and take a video tour: [auckland.ac.nz/engineering-building-success](http://auckland.ac.nz/engineering-building-success)



Jasmax was the architect and Hawkins Construction the contractor for Te Herenga Mātai Pūkaha.

Photo: Dennis Radermacher

## EDUCATORS MAKE AN IMPACT

Experience in dealing with children post-disaster is vital in 2020

**T**he Faculty of Education and Social Work has been making a big impact on both sides of the Tasman with its arts resources for classrooms. In January, Professors Peter O'Connor and Carol Mutch helped provide tools for Australian teachers returning to the classroom after the devastating bush fires. Before the term started, teachers met in Sydney to hear the expertise of academics including arts educator Peter and colleague Carol who were among 30 academics in Sydney from Auckland and Australian universities. The result was a set of resources and advice for teachers called The Banksia Project, posted on the New South Wales Arts Health network site. Teachers in schools across NSW were directed to it for support as they returned to schools.

"Universities are slow beasts, but we had academics who were really fast. For this to be meaningful, it had to be up and out for the first day back at school. And we did it," says Peter.

The same kind of quick action, drawing on years of experience working in schools

post-disaster, led to a resource for New Zealand teachers in response to the pandemic. Peter and the team devised an arts-based resource project including lesson plans to support primary-school teachers dealing with anxious students returning to school post lockdown. The resource, Te Rito Toi ([www.teritotoi.org](http://www.teritotoi.org)) included a poetry lesson by Professor Selina Tusitala Marsh.

"The resources recommend teachers use an arts and well-being approach to engage children in this changed classroom environment," says Peter.

Full stories: [auckland.ac.nz/te-rito-toi-resource](http://auckland.ac.nz/te-rito-toi-resource) and [auckland.ac.nz/bush-fire-resource](http://auckland.ac.nz/bush-fire-resource)

### MORE NEWS

Keep up to date with University news [auckland.ac.nz/all-UOA-news-stories](http://auckland.ac.nz/all-UOA-news-stories)

Professor Peter O'Connor creates specialist toolkits for teachers.

Photo: Elise Manahan



## SIOUXSIE HEADS TO THE SEWERS

Siouxsie Wiles' work on superbugs has received a boost

A pilot study will delve into Auckland's sewer network to assess and map levels of antibiotic resistance in the community. The study will be led by Associate Professor Siouxsie Wiles from the Faculty of Medical and Health Sciences, who came to the fore during Covid-19 with her easy-to-understand communications.

Siouxsie has won a Health Research Council (HRC) Explorer Grant to investigate Auckland's sewers for antibiotic-resistant superbugs.

"Currently, New Zealand monitors antibiotic-resistant bacteria by analysing samples collected from hospital and community laboratories," she says. "The drawback is that it fails to capture information about resistant bacteria carried by healthy people who have no symptoms, so we don't have a clear idea of what superbugs are out there in the general public."

Healthy people can harbour superbugs in their nose or gut and not be unwell. "But one day they might end up needing surgery and that

Associate Professor Siouxsie Wiles will analyse sewer samples for signs of superbugs.



organism could end up in their bloodstream where it will be very difficult to treat. Or they could inadvertently pass it on to someone else.

"Our study aims to understand what organisms are out there in communities without taking a nasal swab or a faecal sample."

Researchers will sample hospital effluent and compare it with samples from wastewater treatment plants serving 'healthy' communities without a primary-care facility in their area.

Others from Auckland to receive HRC grants were Dr Stephanie Dawes (antibiotics); Dr Meghan Hill (stillbirth); Dr Haribalan Kumar (lungs); Dr Danielle Lottridge (stroke rehabilitation); Dr Benjamin Lawrence (tumours); Professor Anthony Phillips, two studies (lungs/lymphatics); and Dr Simone Rodda (addiction).

## OLD BRIDGE FOR NEW INSIGHTS

A decommissioned bridge will provide engineers worldwide with vital information

Cutting-edge research on the decommissioned Whirokino Bridge will give scientists and engineers around the world invaluable insights into the strength of key infrastructure during seismic events. The 90-year-old bridge on State Highway One south of Foxton has

The old Whirokino Bridge, with the new one in the distance.

been replaced by Waka Kotahi NZ Transport Agency, with a wider \$70m structure over the Manawatū River and Moutoa floodplain.

Deconstruction of the old bridge is giving Dr Lucas Hogan from the University of Auckland an unprecedented opportunity to do 'real life' testing of how a long bridge behaves in an earthquake.

"This is a unique opportunity to put a real bridge through its paces and even push it to failure," says Lucas, whose research is the result of an innovative partnership between government, academic and corporate organisations. It is funded by the Earthquake Commission (EQC) and QuakeCoRE and carried out in co-operation with Waka Kotahi as the owner of the bridge. Demolition sub-contractors are working with lead contractor Brian Perry Civil, a division of Fletcher, to fine-tune the deconstruction programme to fit with the University team's scientific needs.

"A big focus will be on how the piles holding the bridge up behave in earthquake conditions," Lucas says. "These types of piles are used in around half of all bridges in New Zealand, and many internationally, so it's very practical science."

Full story: [auckland.ac.nz/bridge-research](http://auckland.ac.nz/bridge-research)



# Clues in the DNA

Samoa had an exponential jump in its population 1,000 years ago

A study has undercovered some unknown details about Samoa's population and Samoan lineage. The study, which included Associate Professor Ethan Cochrane from Anthropology, analysed modern DNA from more than 1,100 Samoans collected as part of an earlier study involving several US universities and the Samoan Ministry of Health. While that study uncovered links between particular genetic

Dr Ethan Cochrane and Pena, one of his research assistants on the ground in Falevao Village, Samoa.



profiles and increased risk of heart disease, the latest study, published in *Proceedings of the National Academy of Sciences* (PNAS), analysed the same data to estimate the degree of shared ancestry of present-day Samoans with other human groups, the degree of shared genetic similarity within Samoan people and then estimated Samoa's changing population size over time.

"Despite the prevailing archaeological opinion that the initial population size of Samoa would have been relatively similar to Tonga and Fiji, our genetic results indicate that the founding population of Samoa was actually quite small, between 800 and 3,300 people, and stayed quite low until about 1,000 years ago," says Ethan.

The study also found that modern Samoans come largely from Austronesian lineage (Taiwan, Southeast Asia, Micronesia, coastal New Guinea, Melanesia, Polynesia, and Madagascar) and share only 24 percent of their ancestry with Papuans. This is markedly lower than neighbouring Polynesian groups which, on average, share about 35 percent Papuan ancestry. The unique mixture of Austronesian and Papuan ancestry in Samoans may be related to the initial settlement of the islands and suggests that groups with somewhat different ancestry settled Samoa, compared with nearby Tonga, Ethan says. "What we are learning ... is there may have been different migrations with different mixes of people and unique demographic histories that have contributed to modern cultural, biological and linguistic diversity in the Pacific."

Full story: [auckland.ac.nz/SamoanDNAStudy](http://auckland.ac.nz/SamoanDNAStudy)

# Kea make smart choices in life

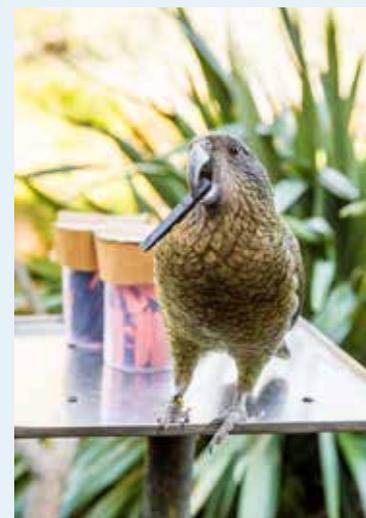
A three-part study on kea shows they're smarter than we thought

Kea make smart predictions, behaving similarly to humans when faced with statistical reasoning tasks, according to research by the School of Psychology. Publishing in *Nature Communications*, PhD candidate Amalia Bastos and Associate Professor Alex Taylor tested New Zealand's alpine parrots (*Nestor notabilis*) on their ability to make predictions using statistical, physical and social information. In the three-part study, six kea from Willowbank Wildlife Reserve near Christchurch were first shown that choosing a black-coloured token always led to a food reward, while an orange-coloured token never did. They were then shown two jars of

mixed tokens, one with more black tokens than orange and one with more orange than black. A human experimenter then reached into each jar and brought out a token hidden in their fist, so the birds could not see what colour it was.

Kea then had to predict which hand they thought held the prized black token. The birds consistently chose the hand that had reached into the jar with the greatest number of black tokens, showing they could use the relative frequency of black and orange tokens to make a prediction. The experimenters then tested if kea could combine other sources of knowledge into their predictions about uncertain events. The birds were presented with two jars of tokens with a barrier positioned between top and bottom, so that only the tokens at the top were accessible. Even though both jars had an equal number of black and orange tokens in total, kea consistently chose from the jar that had a greater number of black tokens in the accessible top half.

Full story: [auckland.ac.nz/kea-study](http://auckland.ac.nz/kea-study)



Presented with a number of variables, kea consistently chose the food-connected black tokens.  
Photo: Amalia Bastos



## TEMPERATURE DEVICE COOL

**A matchbox-sized body sensor worn under the arm, which sends data over long distances to register if someone has a fever, has won MBIE funding to conduct clinical trials.**

The temperature-reading biosensor called ‘Nightingale’ is designed to protect those most at risk and avoid cluster outbreaks of Covid-19 in places like rest homes. “It’s about getting really high visibility on the disease by knowing where the cases are and what’s happening as quickly as possible,” says project lead scientist Associate Professor Nick Gant from the University.

Invented by a group of tech entrepreneurs during lockdown, Nightingale uses very little power by utilising low-power wide area network technology, so the signal can carry over many kilometres to receiver stations and it has a device battery life of several months. “The sensor can rapidly signal new outbreaks of Covid-19 in near real-time,” says device designer Neal Radford. “It’s continuous mass monitoring at a distance, so it’s a world-first.”

**Full story:** [auckland.ac.nz/nightingale-device](http://auckland.ac.nz/nightingale-device)

## LUMPED IN TOGETHER

**Professor Merryn Gott and a team at Te Ārai Research Group have won funding to look at the impact of Covid-19 and lockdown on those aged 70 plus.**

The year-long study won’t be considering their mortality rates, so much as finding out if their voices were ever heard. People aged 70 and over were singled out as the group most vulnerable to being affected by Covid-19.

“They’ve tended to be lumped together and collectively characterised as passive and vulnerable,” says Merryn. “This not only conflates a culturally, ethnically, socio-economically and geographically diverse segment of the population, but also may contribute towards older people feeling really excluded despite so many of them being major contributors to society.”

The study, funded by the Auckland Medical Research Foundation, will build on the group’s Ageing Well study and aims to feed back their experiences and perspectives to guide policy. **Read more:** [tearaireresearchgroup.org](http://tearaireresearchgroup.org) and to take part in the study: [HaveOurSay.org](http://HaveOurSay.org)

## IMPACT ON KAUMĀTUA IS KEY

**A Health Research Council grant will help researchers at the James Henare Māori Research Centre assess the impact of Covid-19 on kaumātua and tikanga.**

The centre’s director, Dr Marama Muru-Lanning, will lead the six-month study, *Harirū, Hongi and Hau in the Time of Covid-19*. Researchers will talk to kaumātua about their experiences, to gain an understanding of how older Māori interpreted regulations around physical distancing, both during lockdown and beyond into the less-restrictive levels.

The research is considered essential for the future health of Māori in considering whether traditional greetings, such as the hongi, will return. “What I’ve learned talking to kaumātua is that tikanga is a fluid thing and has to change to fit the times,” says Marama. “It will be interesting to see how, going forward, people will feel about the hongi and harirū [handshake].”

Researchers have had to undertake contactless interviews via cellphones and iPads.

**Full story:** [auckland.ac.nz/covid-tikanga-study](http://auckland.ac.nz/covid-tikanga-study)

## SOLVING A SHIELD ISSUE

**Auckland Bioengineering Institute (ABI) and MedTech CoRE researchers designed a reusable face shield to help keep medical staff safe, while treating patients infected with Covid-19.**

Around 20,000 units were produced from mid-April, in response to demand from the private and the public health sector. The simple design comprised a plastic frame and transparent plastic sheet, which can be disinfected and reused. It was developed by Dr Paul Roberts at the ABI with support from MedTech CoRE collaborators and industry partners after concerns were expressed about the lack of personal protective equipment (PPE) in healthcare. The shields are worn over surgical face masks, as another layer of protection.

The prototype was made by laser cutting the plastic shield and retrofitting to frames of safety glasses. Urgent demand prompted a switch to injection-moulding frames, allowing production volumes of 10,000 per day in Lower Hutt and Auckland factories that produce food packaging.

**Full story:** [auckland.ac.nz/ABIFaceShields](http://auckland.ac.nz/ABIFaceShields)

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# RAISING ENTREPRENEURS

By Owen Poland

Survival rates of businesses set up by Auckland graduates have been shown to be double the average – and those strengths are needed now more than ever.

*Professor of Entrepreneurship Rod McNaughton, above, says the survey backs up the University's mission to educate students to have an 'entrepreneurial mindset'.*

The critical role alumni play in bolstering the New Zealand economy has been revealed in a University of Auckland survey. The survey reinforces the University's vision to cement innovation and entrepreneurship as part of its DNA.

The results of the Alumni Innovation and Entrepreneurship Survey are impressive. Responses from more than 4,000 graduates dating back to 1940 have been extrapolated to show that 26 percent of alumni have founded an estimated 43,500 companies here and overseas and created approximately 383,000 jobs since the 1960s.

While the survey demonstrates the huge impact the University has on the economy, senior researcher and analyst Lise Eriksen says one of the most striking statistics is the survival rate of businesses after five years – more than double the national average. What's more, Lise says there's been a shift towards hi-tech businesses such as computer software developers and health and medical-related companies which have greater growth potential and help diversify the economy.

"That's really important and shows that our students are going out there and making a difference in New Zealand."

For Professor of Entrepreneurship Rod McNaughton, the alumni survey supports the value of students having an 'entrepreneurial mindset' when they graduate. While some are predisposed to thinking in an entrepreneurial way, Rod says it is

possible to improve skills such as problem solving and value creation.

"The University's new graduate profile aims to develop innovators who are future and solution-focused, creative and capable of developing unique and sustainable solutions to real-world problems. The way of thinking and the capabilities associated with entrepreneurs are increasingly recognised as important, no matter what a graduate's career path."

Interestingly, 34 percent of the alumni entrepreneurs fit the description of 'serial entrepreneurs', those who have founded two or more companies during their careers.

"It is clearly significant because serial entrepreneurs will tend to have, over time, a greater impact on the economy in terms of employment and revenue generation," says Lise.

On the score of gender, 41 percent of the alumni entrepreneurs in the survey are women where Lise says there's a lot of untapped entrepreneurial potential, something the University is looking to address. In fact, the University of Auckland now has more females than males participating in the extracurricular programmes offered by the Centre for Innovation and Entrepreneurship.

Alumnae also featured in a 2019 report by UK business banking app Tide, which found that New Zealand has the world's highest percentage (13.4 percent) of female start-up founder graduates. The ranking was based on capital-raising data sourced from Crunchbase, and among the prominent alumni identified by Tide were Elizabeth Iorns, co-founder of Science Exchange (\$112.6m capital raised) and Jen Lim, co-founder of Shopmatic (\$8.8m capital raised).



Annabelle Collins changed her focus from creating game pieces to helping protect medical staff.

In addition to a growing number of courses that signpost the importance of innovation and entrepreneurship, extracurricular activities play a crucial role. The Velocity entrepreneurship programme, formerly Spark, has attracted more than 15,000 students since 2003. Ventures started by alumni through Velocity have raised over \$258m in capital.

Situated in the Unleash Space innovation hub, the VentureLab incubator, launched by the Centre for Innovation and Entrepreneurship (CIE) in 2018 and funded by philanthropy, adds to the mix by giving students the space, expertise and resources to fully ignite their ideas.

Forced to suspend her PhD in Science after a serious motor accident, Annabelle Collins is forever grateful for her time in the Summer Lab student entrepreneurship programme, which she says changed her way of thinking.

A fan of role-playing game Dungeons and Dragons, Annabelle had the idea of creating reversible terrain tiles to enhance the experience of players. Within a matter of hours, the Creative Technologists (CTs) in the Unleash Space had taught her how to use a 3D printer to create a prototype for her new business, Modular Realms.

“What I love is that the CTs there have wildly different skill sets, so I got so many different perspectives on my project,” she says.

Like most businesses, her fledgling enterprise came to a halt because of Covid-19. With the shortage of personal protective equipment (PPE) in the UK, where a number of her 3D printers that print the tiles are based, she put her plans on hold and dedicated those machines to producing PPE. “It just felt right. If I have the ability to do something to help vulnerable people in times like these, then how can I not?”

Annabelle, a former chemistry student, was familiar with PPE but not its design. “I did a lot of research on materials and their ability to filter out different particles, and kept up to date with new PPE being designed to deal with this crisis.”

She eventually decided to print the Prusa Face Shield, widely accepted by hospitals around the world. She also took on a role for New Zealand,

communicating with everyone from surgeons to vets and rest-home staff, acting as the go-between for them and hobbyist manufacturers like herself.

“I met some really incredible and inspirational people by doing this,” she says. “I never saw myself as someone qualified to be speaking to surgeons or hospital staff about PPE manufacturing and distribution.”

Having learned a lot, she’s now refocusing on her original venture, Modular Realms ([modularrealms.com](http://modularrealms.com)), and the Kickstarter campaign to raise capital for injection moulding was funded in several hours.

Back in Unleash Space, the team continues to innovate despite physical closure. The CIE announced additional prizes for its annual Velocity Innovation Challenge, focused on Covid-19. The Challenge asked entrants to tackle problems the pandemic has presented, with a \$1,000 prize for the best solution to a social challenge and \$1,000 for the best solution to an economic challenge. The social challenge prize went to a digital learning platform called CircleOut, and the commercial innovation prize to RosterLab, which creates high-quality rosters for hospitals using AI. (See all the winning ideas at [auckland.ac.nz/CIE-Velocity-winners](http://auckland.ac.nz/CIE-Velocity-winners).)

It is initiatives like these that impress North American entrepreneur and educator Peter Racher, appointed as the Hynds Entrepreneurial Teaching Fellow in 2019. His role is to integrate innovation and entrepreneurship concepts into curricula across the entire Auckland campus.

“Anything from dating apps to climate change,” he says. “It’s about how can you effect change, how you can create a new product or company, how can you make an improvement, or a new social movement from what you’ve learnt.”

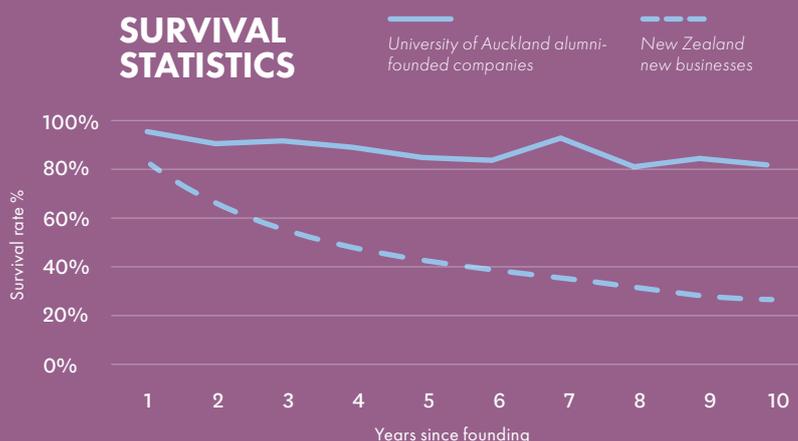
The goal by 2025 is to have 10 percent of all students leave with a meaningful entrepreneurship experience. “Ultimately, we want to identify and support students who can do something more scalable and drive the creation of new opportunities and ventures.”

International recognition as the inaugural Asia-Pacific Entrepreneurial University of the Year in 2020 confirms that Auckland is on the right track and Rod says part of that success comes down to Auckland having a “first-mover advantage” through entities such as UniServices. Founded in 1988, the University’s research and knowledge-transfer company has chalked up many high-profile successes including HaloIPT, Soul Machines and PowerbyProxi. Its executive director of commercialisation, Will Charles, says 2019 was a record year for idea disclosures, company formations and patent licensing.

“It’s really important that we continue to demonstrate we can turn that fundamental research into new high-margin, high-quality products, services and jobs.”

Receiving a Kiwinet Commercialisation

Survival rates of University of Auckland alumni-founded companies versus all New Zealand new businesses formed 2008 to 2018.



Professional Award in 2019 was due recognition for Will, who says the secret is to act like a dedicated and sympathetic investor – something made possible with initiatives like the \$20 million University of Auckland Inventors' Fund.

“That’s been one of the key drivers of success because we have an alignment of interests with investors and understand what they want, while at the same time understand the needs and pressures on academic staff and their students. As an investor, we also know that the key to success is to provide our inventors with the right incentives, assistance and environment to succeed.”

Having preferential access to about \$400m in capital through relationships with the British-based intellectual property company IP Group plc and Australia’s Brandon Capital Partners also means Will can “shake the tree harder” and further promote innovation and entrepreneurship.

And, it seems, opportunities abound. A recent survey revealed that 7 percent of the University’s students already run their own businesses – albeit often to pay for their education, and they don’t plan to continue when they graduate. Rod says this could change.

“We are looking at ways to help these businesses grow and scale, and create opportunities for these students to integrate their business experiences with their studies.”

Will says the future focus needs to be on building human capability in the next generation of PhD and masters students to get them thinking not so much about how to get a good job but “how many jobs can I create?”

He says commercialisation of research becomes scalable if we can “unleash an army” of postgraduate students who are able to take their ideas and knowledge into new products and services at some stage in their careers. He says creating an ‘entrepreneurial ecosystem’ is a journey, but all the signals are there that we are poised for exponential growth in the next ten to 15 years, despite Covid-19.

“The University will be seen as having been transformational in the economy.”

Exactly what’s needed right now. ■



Will Charles, executive director of commercialisation at UniServices, wants to ‘unleash an army’.

## GREG O’GRADY

### THE INSIDES COMPANY

As a PhD student in bioengineering, Greg O’Grady says the Velocity programme in 2009 was formative in developing an appetite for entrepreneurship. “The process of building a business plan and putting something together that provides a narrative of the company you’re pitching is definitely a good building block to getting entrepreneurial experience.”

A decade later, the associate professor at the Faculty of Medical and Health Sciences is also the chief scientific officer and co-founder of The Insides Company (TICL), which has developed a range of medical devices that can reduce the time until patients can fully use their guts again following major internal complications and bowel surgery. A \$4.3m capital-raising in 2019 and a Breakthrough Device designation by the Food and Drug Administration (FDA) will help TICL bring its devices to market. Greg says initial funding by the MedTech CoRE in the Auckland Bioengineering Institute and the Accelerating Research Translation (ART) fund was “instrumental in getting us going” and enabled the building of prototypes. UniServices helped source funds and navigate the intellectual property process, while the Return on Science commercialisation programme gave guidance on how to take good science to the real world.



Associate Professor Greg O’Grady says initial funding by MedTech CoRE was a great kick-start.

## ARASH TAYEBI

### KARA TECHNOLOGIES

Arash Tayebi is co-founder and CEO of Kara Technologies, an online platform delivering educational material to deaf children, using artificial intelligence and sign language avatars.

When the Iranian-born electrical engineering PhD student came to the University of Auckland, he joined the Velocity programme, which provided the training, support and funding to get started. “If you make mistakes in the entrepreneurial environment, it can be fatal for business, so it was a safe place to explore, learn, make mistakes, learn from the mistakes and to come up with a really good business.”

Winning the social entrepreneurship category of the 2017 Velocity \$100k challenge enabled Arash, and co-founders Sahar Izadi and Farmehr Farhour, to participate in the VentureLab incubator programme, which included a \$5,000 grant to build a minimal viable product. Arash says he valued being able to collaborate with other faculties and is also grateful for mentoring by VentureLab manager Ken Erskine, a “rock star” in New Zealand’s investment and entrepreneurial community.



Arash Tayebi says Velocity provided a safe place to learn and make mistakes.

 Watch Online

See entrepreneurs who have gone through Unleash Space at [tinyurl.com/UoA-entrepreneurs](https://tinyurl.com/UoA-entrepreneurs)

## CO-OPERATION HAS BEEN CRUCIAL

Professor Tim Dare

**T**he Covid-19 pandemic has seen an extraordinary abrogation of civil liberties that would have been unthinkable in the past. Should we fear that they foreshadow an ongoing loss of personal freedom and other basic liberties?

I suspect not. It is important to note how much the government, in New Zealand at least, relied upon the co-operation of citizens. We should not underestimate the importance of that co-operation: coercion is an expensive and ineffective way of securing compliance with the law. Had a significant proportion of New Zealanders declined to co-operate – forcing the police to prosecute – the lockdown would not have been sustainable. The curtailment of our liberties was achieved because almost all of us thought their curtailment reasonable.

For the future, then, it seems unlikely that the most dramatic curtailments of personal liberty will continue. They required our co-operation, and once the pandemic has passed, continuation of that co-operation seems unlikely – perhaps unthinkable. Note, too, that personal freedom exercised within the broad parameters set by most liberal democracies is an asset. Its curtailment has been enormously expensive. It made sense only given clear and equally enormous countervailing costs. We shan't need to demand the return of most of them: they'll be pressed upon us.

What about others? Many governments will use tracking technology to trace those who have been near confirmed Covid cases. (Manual alternatives, note, are not only ineffective, but also may be more intrusive.) Governments should favour versions that require the co-operation of users. There is a cost to doing so – it makes it hard to guarantee enough people will use the technology – but it preserves the sense that 'we are all in this together', and, again, that co-operation matters. In any event, governments must guarantee that such technology has a use-by date: once the extraordinary justification goes, so must applications of the technology.

I think there is a bright side. Rarely have we seen the current level of co-operation between citizens and government. As we came through this threat and regained our liberties, perhaps we recognised that they were only one valuable thing among many. What if we could harness the same level of trust and readiness to temporarily put aside self-interest – even risk our most cherished liberties – to target other threats such as climate change and child maltreatment, that we have hitherto thought unconquerable?

*Professor Tim Dare* Philosophy and legal ethics

Could Covid-19 lockdowns  
trigger an ongoing loss of

# PERSONAL FREEDOM AROUND THE WORLD?

What do you think? Have your say. Facebook: UoAAlumni  
Twitter: @AucklandAlumni Email: ingenio@auckland.ac.nz

*The writers' views reflect personal opinions and  
may not be those of the University of Auckland.*

## DEFAULT SETTING IS FREEDOM

Professor Paul Rishworth

When the virus arrived, people around the world were asked, and many ordered, by their governments to sacrifice some of their liberty to prevent its spread. In New Zealand, even the freedom to exercise was constrained by legal rules including one that precluded swimming and fishing for safety reasons, yet allowed cycling.

It is very unusual for law to reach so far into our lives. We do not, for example, legislate against smoking in private or poor food choices, still less about our house guests. We are free to decide what is good for ourselves. But we accepted unusual constraints (including living in ‘bubbles’) in the face of a great peril.

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**“Restraints on most freedoms can be justified for pressing reasons such as ‘public health’, so long as restraint is proportionate to need.”**

That acceptance was, for most, accompanied by a healthy scepticism. Constraint, yes, but only for so long as it is supported by evidence. Our admiration for effective leadership has been very closely connected to our reverence for public

health expertise (and experts). Kiwis like getting the job done, and we’re prepared to play our part for the common good.

That is a healthy intuition. It’s reflected also in the international human rights instruments and our own Bill of Rights. These recognise that restraints on most freedoms can be justified for pressing reasons such as ‘public health’, so long as restraint is proportionate to need. This, we might say, is evidence-based law. The default setting is freedom – of movement, association, assembly, religion and expression.

So, what will happen when the virus leaves us? Other existential threats have not seized our attention in quite the way Covid-19 has during these strange days of 2020. It is a considerable irony that a microscopic virus proved so adept at bringing the world to near standstill, allowing us time to see the sky and hear the birds.

There is now talk of a ‘post-virus world’, a time of recalibration. Obviously there will be competing visions about how we deal with threats such as climate change, and which measures are best indicated by the best evidence.

But the need to accommodate ourselves to the realities of our planet is not a limit on our freedoms. Rather, it is a necessity if freedom is to flourish.

*Professor Paul Rishworth QC Former Dean of Law who specialises in human rights law.*

## IMPROVED RESILIENCE

Dr Jiamou Liu

As well as triggering the largest online teaching practice in human history, lockdowns around the world have facilitated the adoption of novel Artificial Intelligence (AI) and data-driven technologies, which have demonstrated revolutionary potential for the future.

While industrial giants such as Apple and Google have experimented with Bluetooth for contact tracing, China relied on big-data analytics to predict crowd movement out of Wuhan before the lockdown started. Hospitals in Shanghai used robots to disinfect their indoor areas and machine vision to diagnose Covid-19 from CT scans, at an accuracy comparable to human experts. Alibaba, the world’s largest retailer and e-commerce company, has applied virtual chatbots to answer Covid-related questions from the public and managed 90 percent of user queries in parts of China. There are numerous other cases where AI and robotic technologies have helped in item delivery, temperature taking and crowd simulation.

The world’s largest 5G network rolled out at the end of 2019 and has not only enabled millions to watch the hospital constructions in Wuhan in real time, but also has provided countless medical workers the power to conduct their diagnoses through virtual/augmented reality. Thanks to such technological advancements, our way of life has never been so resilient and this unprecedented period will surely impact the world long after the pandemic is over.

On a personal note, I have enjoyed, somewhat to my surprise, much freedom, as a portion of life moved from the physical world to the virtual. The endless traffic during my daily commute, back-to-back meetings, and the constant interruptions from phone calls, emails and drop-ins that kept me from getting work done all seem to be memories from a distant past. The weekly Zoom meetings with my students have gone smoothly. The online platform where I interact with a class of 120-plus students in Chongqing, as part of a bilateral teaching collaboration, allows me to track their engagement with my (recorded) classes, something impossible in the past.

Unity and co-operation are still in great need, but real danger does loom as certain politicians – outside New Zealand – point fingers at each other while manipulating public attention, withdrawing from international co-operation, and fuelling public fear and anger. A dark cold-war rhetoric threatens to divide the world and shatter the very foundation of our freedom and a resilient human future.

*Dr Jiamou Liu Senior lecturer in computer science.*



## IN IT FOR THE LONG HAUL

By Denise Montgomery

Professor Susan Morton is the principal investigator on New Zealand's biggest longitudinal study – *Growing Up in New Zealand*. She and her research team are the voices of families who may not always be heard.

Professor Susan Morton would have you think she's an unlikely academic. An epidemiologist and specialist in public health medicine in the Faculty of Medical and Health Sciences, her in-depth work as the principal investigator for the *Growing Up in New Zealand* study proves otherwise.

The study, now in its 15th year, will publicly release its latest findings in the coming months – on its cohort of about 6,800 children. This release focuses on the children aged eight and its exact timing will depend on a number of factors, not the least of which is the impact of the lockdown, or post-lockdown, world. Additional research has been undertaken specifically related to the Covid-19 lockdown.

With information on education, health and poverty, the goal is to provide evidence and stories that can inform good public policy.

“This year, our approach was to tie it to the

Government's Child and Youth Well-being Strategy,” says Susan. “That aligns beautifully with the framework we put in place 15 years ago. We are interested in the holistic well-being of these children and their development.”

*Growing Up in New Zealand* was launched in 2008 after a three-year development phase. In 2009-10 the families were recruited and the children in the study were born over 15 months. The study has some similarities with the well-known Dunedin longitudinal study but also some important points of difference. *Growing Up in New Zealand* began before the children were born and there was intense follow-up in the first 1,000 days. Most importantly, it represents the ethnic diversity of children in New Zealand today rather than the mostly New Zealand European children who were born in Dunedin in the early 1970s.

“We brought families on board with the

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Professor Susan Morton says her path to becoming a full-time academic was a circuitous one.  
Photo: Elise Manahan

parents' knowledge that we wanted to engage with these children until they were 21," says Susan.

The children are now approaching 11, so innovative techniques are needed to keep them engaged with the two-hour interview process that takes place every three years or so.

"This generation is differently connected than any generation before," she says. "They're digital natives and their way of engaging with society and their peers is vastly different from what it was even five years ago.

"Alongside collecting, processing and using this information to inform policy, we are constantly thinking about methodological innovations for conducting the research. How do we engage with the children in a way that makes them feel valued and provides ways for them to contribute their unique voice to something important?"

Currently, iPads are among the tools, but the technology must keep evolving. The disruptions caused by Covid-19 made that even more important.

"We're looking to bring forward the development of online/digital data collection as our primary method rather than as a complementary one," says Susan, of the impact of Covid-19.

"It needs to have an inbuilt contingency depending on whether we're in lockdown situations or having to stay at home for health. So that will be how we operate for the main cohort we're planning to engage with in 2021 when they are 11 years old."

In the first 1,000 days of these children's lives, the interaction between researchers and families was every few months, to gain insights into how the early years of life affect children as they grow older.

"Those first 1,000 days shape the developmental trajectories for the rest of their lives, so we really wanted to have as much information as we could about the rapidity of growth and change and development ... information that hadn't been available from earlier studies."

**S**usan is passionate about public health, but her path to becoming the lead investigator on such a major study was a circuitous and somewhat surprising one.

"I never wanted to be an academic. I really wanted to be a maths teacher, and then a paediatrician. Suddenly I find myself with a huge responsibility and yet huge privilege to be running this amazing study."

After achieving a first-class honours degree in maths, Susan was teaching the subject in Lower Hutt, Wellington. As a mother to two daughters, she also sat in on Health Board meetings to lobby for better care for new mothers. She

then set her thoughts towards a new career and moved north with the family to study medicine at the University of Auckland.

After completing her studies (with a gap year for the birth of her third baby), Susan embarked on paediatrics as a speciality. She was working in the hospital and juggling parenthood before opting to undertake a PhD. With the assistance of a Commonwealth Scholarship, she headed to the London School of Hygiene and Tropical Medicine in 1998 with husband Grant and three young children in tow. Her thinking was that a PhD would allow her to spend more time with her family and that she would return to paediatric training thereafter.

When she got to the UK, circumstances meant she didn't end up working on the PhD project she'd intended.

"But I was lucky to be introduced to David Leon, a young epidemiologist interested in population health. He had been trying to extract a dataset from a researcher called Raymond Illsley who had undertaken a study of Aberdeen children born in the 1950s. The data had largely sat dormant since the 1960s."

It included information about more than 15,000 children, their parents and family backgrounds as well as their educational and health records. Susan revitalised the dataset and linked the information with millions of

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**"They just want to be heard. They want to be part of something that potentially can make a difference."**

– Professor Susan Morton, Faculty of Medical and Health Sciences

reproductive records of the Scottish women who were born in the 1950s, to recreate their reproductive histories from 1967 to 2001, thereby generating information about development across three generations.

"Raymond was 90-plus and was steadfastly wanting to choose who used his data. We went to visit him in the middle of the English countryside, and I was this eager junior researcher from Taranaki, New Zealand, looking for a PhD topic. For whatever reason – maybe the timing was right, maybe he saw something in what we were proposing to do – he basically said, go for it.

"Maybe he also recognised his own advanced years and didn't want all this data to languish in his garage. He'd had amazing vision in the 1960s to collect all this information and document it so beautifully."

The result for Susan was a PhD and several manuscripts that demonstrated that a mother's



Georgia (centre) and her family are part of the study. Families were told right from the outset that researchers would like to work with them until their children turned 21.

◀ childhood social environment (provided by the child’s grandparents) and her own early growth and development were important predictors of her own offspring’s size at birth. From the experience of working on the Aberdeen study, and becoming aware of the impact of the social environment on health, Susan knew her clinical career was headed towards population health.

“That I ended up working on such a study was serendipitous. I fell in love with longitudinal studies, being able to follow ordinary people’s lives over time to bring their collected stories together to create something extraordinary. It was the opportunity to provide evidence that could inform policy and make a difference by actually understanding what lived realities were about, rather than just looking at routine statistics or big data.”

There was no looking back. In recent years Susan’s work has seen her honoured with a New Zealand Order of Merit and made a professor at the University of Auckland. In delivering her inaugural professorial lecture in 2019, Susan paid tribute to a number of people who’d had a huge impact on her academic success. They included Professor Emeritus Robert Beaglehole, Sir Peter Gluckman and Professor Jane Harding of the Liggins Institute.

“I’d come into my first year of medical school as a mum, having had five years away from the classroom. I’m good at thinking if I get something a little bit wrong then I’ll fail completely.

“However, things went well for me, albeit with much juggling of family and study. At the end of my first year, I was seeking employment to fund my ongoing studies, but needed to have a position that also allowed me to be a mum.

“I applied for a summer scholarship, which was picked up by Dame Jane Harding and I was fortunate to work alongside her in neonatal paediatrics. That was the beginning of my academic journey.”

Susan returned to New Zealand from the

UK in 2003, at a time when the Government was looking to initiate a longitudinal study to provide evidence to inform the work of up to 16 government agencies.

She led a team based at the University who successfully bid for the development phase of the study in late 2004. After a period of study design and peer review, *Growing Up in New Zealand* was launched in April 2008 and is New Zealand’s largest longitudinal study. The Government’s Well-being Budget in 2019 recognised its contribution by providing a further \$17 million in funding to continue following the cohort into their adolescent years.

Susan was also awarded an MBIE Endeavour Grant in 2019, providing \$6 million over five years to develop innovative methods to engage with the participants and more rapid techniques to translate longitudinal information into timely policy-relevant evidence.

**T**he study also has parental consent to link to the child’s national health and education data. “Around 95-98 percent of participants agreed to that from the beginning. That gives a much richer source of what’s going on, with cross-checks and validation.”

Susan says parents, caregivers and children are still fully engaged.

“Getting the families on board was not an overnight process. We took two years to consult widely with families, communities and, particularly, with Māori and Pacific [peoples]. This was always a study that was going to partner with government in terms of providing evidence, but some communities have a distrust of government.

“So we had to do a lot of work as university researchers to talk to these communities about what the study was, and how their voices could make a difference.

“They believe their voices are not being heard at the policy table, and they want them



Children like Jonathan reflect New Zealand’s diverse communities.

to be. We explained how we would provide guardianship of the data and protect their privacy as we went through this long process. That said, it's a constant challenge and we have to keep going back to communities. But what we have built over the past ten years is the trust of the University's research team.

"We're very aware this resource is a treasure and we take our guardianship role with its data extremely seriously."

As well as valuing the data, the team has promised to act on it, while keeping all identifying information confidential.

"We are giving voice to that information as promised. It's our responsibility to take that collection of voices to the policy table on behalf of these people who are least often heard. What is critically important to the ongoing trust relationship is remembering why they wanted to do this."

There's almost a socially philanthropic aspect to what the families are doing.

"They generally don't want to be paid," says Susan. "They just want to be heard. They want to be part of something that potentially can make a difference."

The researchers also welcome collaborations with groups who can use the longitudinal information to improve community and population well-being.

"One of the things I'm most proud about would be the experience of working with The Southern Initiative (TSI) Tāmaki Herehere ki te Tonga in South Auckland. They're very engaged with their families in terms of how to better support their well-being. We worked with them to look into resilience in those communities. Around 1,500 of our families live in that area and 80 percent of them experience poverty, by any measure that you chose to apply.

"But not all children who experience poverty have poor outcomes. Within this group there are children who are thriving, so we investigate what supports they have that enable that to happen in the face of adversity."

Susan says the work of TSI, led by Auckland Council, is an example of how the *Growing Up* information can be used to understand "what works". This has relevance for many national strategies. Another benefit of studying the families over such a long period is that they can track movement in and out of certain states over time.

For example, they can compare the impact of persistent poverty to poverty that may be transitional. The longitudinal information can also provide a fuller picture of what poverty is for families with young children, as well as ways it might be alleviated.

"Ascribing poverty based solely on income doesn't reflect the complexity of what poverty means for families, especially in the period

## "It's our responsibility to take that collection of voices to the policy table."

– Professor Susan Morton

around the birth of a child, when income may fluctuate dramatically.

"At that time, a low income may actually be a marker of wealth, with parents able to take unpaid leave to care for their children, rather than a marker of need. That said, the time around the birth of a child is generally when most families struggle financially."

The study looks at why people do things – their choices in everything such as taking time off work, residential mobility, movement in and out of the workforce and relationships, and changing early childhood centres and schools.

"Having this connection with the people in the study allows us to look at the finer grains of life in a much more in-depth way than we can from a Census."

Current investigations will also reveal how resilience may come to the fore during and after the Covid-19 lockdown. "We are committed to these families and our ability to deliver policy and scientifically relevant information in the long term, so we're looking at creative ways to engage with them during this unusual time.

"It's a unique opportunity to understand the impact of this crisis on the children and their families, and track that on their well-being and resilience." ■

### Related Links

*Growing Up in New Zealand:* [growingup.co.nz](http://growingup.co.nz)

Susan Morton's inaugural lecture:

[youtu.be/liaerK8tmkl](https://youtu.be/liaerK8tmkl)

The Southern Initiative [www.tsi.nz](http://www.tsi.nz)

Growing Up in  
New Zealand participant  
Sylvie with her mum, Donna.





# AROUND THE GLOBE

Ingenio catches up with three alumni living overseas and finds out what they are up to and where. **By Wendy Colville**

## HOWARD HUNT *Los Angeles, United States*

**G**lobal brand marketer, entrepreneur and start-up founder Howard Hunt has a string of Fortune 500 companies on his resumé – but it’s a non-profit with a mission of calming the world that has his attention.

“I’m passionate about the good that technology can bring to the world. The situation with Covid-19 has highlighted that. This means creating products and services that delight and shine more light in our lives, including a few passion projects I’ve built.”

Howard graduated from Auckland in 2004 with a BCom. Straight out of university he landed a job with a start-up, the HyperMarket, a mobile marketing agency.

“I had no comprehension that HyperMarket would be so successful and grow to ten world cities, and that I’d live in Hong Kong and New York and experience acquisition by a billion-dollar public company.”

After its sale, Howard worked in marketing for a portfolio of Fortune 500 brands and co-founded Framafoto, a custom framing app. Yet business doesn’t tell the whole story of Howard’s path. “Over the years, my attention dialled in on understanding the human experience,

exploring neuroscience, quantum physics, our mind-body connection and people’s experiences with inner processes and belief systems.”

After living in New York for a decade, he moved to Los Angeles three years ago to focus on creating the HERE Global Foundation, a social enterprise using technology to tackle trauma. “Meditation was a critical door opener for me to manage my own emotional wellness during stressful workloads and this translated into launching a wellness start-up with peace-finding at the core.”

Although Howard thought about heading back to New Zealand from Los Angeles before the lockdown, he decided to hunker down with his partner and her son. “Thankfully, I’ve been blessed to have had a very supportive home life throughout this crisis.”

But many don’t, and HERE is an interactive meditation app to support mental health.

“We’re science-led, stress-busting, self-help heroes on a peace mission. Each of us is a unique melting pot of experiences, genes, societal frameworks and cultural conditionings that have shaped our attitudes and beliefs. We all battle stress, anxiety, depression, past hurts and trauma. So it’s helping people to become aware of their patterns and to master tools that aid release. Behavioural modification and emotional resilience can help us build a better society and that’s very interesting to me.”

HERE ([hereglobalrelief.org](http://hereglobalrelief.org)) was in the middle of fund-raising just as lockdown occurred, and had pledged to partner with frontline humanitarian organisations to support the world’s most vulnerable.

“Now that the curve seems to have flattened, it’s an important time to get back on the road. We are emboldened knowing our service can help many of those facing increasing emotional challenges. With a little luck, investors will finally be bullish in the field of mental health. At least we know many are still stuck at home and can take our phone calls.”

**“We’re science-led, stress-busting, self-help heroes on a peace mission.”**





## LIM BOON PING *Kuala Lumpur, Malaysia*

**M**alaysian-born Lim Boon Ping graduated from the University of Auckland with a Bachelor of Property in 1999 and has since carved out a career as a real estate agent and agent trainer in Kuala Lumpur.

But that took a backseat as a result of Covid-19 and his sideline YouTube cooking channel rapidly overtook his day job. Lim lives with his wife, mother-in-law and three-year-old daughter and he likes to cook. It got him thinking.

“One of the biggest problems for the home cook is always, ‘What do I cook tonight?’ That’s why I started my channel two years ago – to give people cooking ideas. It’s called Cooking Ah Pa (Cooking Daddy), which before Covid-19 had slightly over 100,000 subscribers,” says Lim. “But over three weeks during our Movement Control Order (lockdown), my channel views increased dramatically and is now up around 130,000.

“As well as conducting seminars on how to become a YouTuber and social media influencer, my partner and I launched a home-food delivery smartphone app, through findhomefood.com. It had an overwhelming response.”

Lim was already working with an IT developer

to create other apps, following the success of his YouTube channel. They have launched several on both real estate and cooking subjects.

His philosophy: “Always move out from your comfort zone, that’s the best way to be able to learn new things and have personal achievements. Every crisis has its opportunities.”

Lim emphasises the importance of his family as the inspiration for his social media ventures. As for turning ideas into reality, he credits his university training with some of that success.

“What I really learned from Auckland is to apply theories into practice and the ability to learn new things. I will never get bored with what I’m doing. Almost every day I need to learn new things, especially with technology applications and new algorithms on social media ... these things are always evolving.”

Lim will continue to expand his tech footprint, which works with his lifestyle.

“I believe in work/life balance, no matter how busy I get. I always want to make sure I’m spending enough time with my family, even when I’m not in lockdown with them. The home cooking helps me to spend time with my family, even before we had to due to the coronavirus.”

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**“Almost every day I need to learn new things, especially with technology applications.”**



## HEATHER HARRIS *London, United Kingdom*

**W**hen you work in the Victoria and Albert Museum (V&A), you get to immerse yourself in history every day. Heather Harris is its director of conservation and collections management and the former Auckland says there have been plenty of thrilling moments.

“Standing on a scaffold, centimetres from a Raphael painting that was being conserved, every brush-stroke visible. Watching gorgeous kimonos being mounted and installed for display in the *Kimono: Kyoto to Catwalk* exhibition, or just star-spotting at the V&A openings,” she says.

Being able to hold Queen Victoria’s sapphire and diamond coronet rates as a high point (see it at [tinyurl.com/QueenVictoriaCoronet](http://tinyurl.com/QueenVictoriaCoronet)).

Heather moved to the V&A ([vam.ac.uk](http://vam.ac.uk)) in 2018. Previously, she was the chief operating officer at the Auckland War Memorial Museum. She says her double degree in law and arts from Auckland led to a varied career, spanning diplomacy, law and the arts. “Coming out of university, you need to have planned your first move. For me, it was into Foreign Affairs, which was a great launching pad.”

Her experience in the public and cultural sectors, law and running projects led to leadership roles, and ultimately her current role.

“Working at the V&A is brilliant. It’s a world-

leading art and design museum that’s modern, creative, energetic and on a mission to ensure as many people as possible enjoy its collections.”

Although that’s been a challenge during the Covid-19 crisis, Heather says there’s much to be learnt in terms of new ways of working, and ensuring that organisations plan well for all contingencies, including having robust mobile digital strategies. She says the lockdown has been an opportunity to step back and examine the risks an organisation faces in a time of crisis and to come up with solutions on how to more effectively manage these in the future.

Heather’s role is to lead the team of conservators, collections managers and technicians responsible for caring for the V&A’s collections and getting objects ready for display. “Every year, millions of visitors come here to see the amazing array of artefacts, and to learn about their histories and origins.”

She’s planning for the museum’s reopening, which will, inevitably, be under changed circumstances. And she has advice for graduates.

“Be curious about the world, interested in the people around you and open to opportunities. Beyond this, my advice would be to follow the career thread of what interests and challenges you. Opportunities come about because you’ve made them and are ready.”

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**“Be curious about the world and interested in the people around you.”**

# TIPS ... TO KEEP YOUR MIND SHARP

Your brain is the most precious and complex organ in your body, and it makes you who you are. Unlike some of your other vital organs, it can't be repaired or replaced if it becomes diseased or wears out. Fortunately, writes Professor Cathy Stinear, there are things you can do to keep it sharp.

**1 Move it**  
The simplest thing you can do for the health of your brain is take it for a walk on a regular basis. Being physically active improves blood flow to your brain, even when you're resting. People sometimes think that their bodies need physical training and their brains need mental training. But your brain is just like the rest of your body – it needs regular physical activity to be healthy. Puzzles and crosswords are fun, and with practice you'll get quite good at them. But these skills don't really help with your thinking and memory in your daily life. So it's important to prioritise physical activity over crosswords and puzzles. If you enjoy puzzles, then keep doing them as a reward after you've gone for a walk, been for a swim or worked in the garden.

**2 Rest it**  
We all know how hard it can be to think straight the morning after a night of disrupted sleep. While the occasional bad night won't do much harm, long-term disruptions to sleep quality and quantity have negative effects on brain health. Sleep is when waste products, including proteins linked to the development of dementia, are removed from the brain. The lymphatic system that removes these waste products was only discovered about a decade ago and is most active while we sleep. So, give your brain the chance to do its daily housekeeping with habits that give you the quality and quantity of sleep that you need.

**3 Feed it**  
The basic principles of healthy eating are very simple. To quote Michael Pollan: "Eat food. Not too much. Mainly plants." Real foods are those your grandmother would recognise, made from ingredients you can pronounce. A balanced diet high in fresh, unprocessed foods, and low in salt and sugar, is good for your body and your brain. Beware the superfoods and supplements that make claims about improving brain health. There's no magic ingredient. A balanced diet that keeps your body healthy is the best thing for your brain.

**4 Challenge it**  
Being curious about the world and learning new things gives your brain practice at forming new connections and memories. Connecting what you're learning with what you already know can lead to new insights and understanding. Whether it's learning about viruses, a new language like te reo Māori, how to bake or how to ride a motorbike, you're using a wide range of thinking skills and keeping them sharp. It's never too late to learn something new.

**5 Protect it**  
There's no such thing as a mild concussion. All head knocks are serious because they can have long-term effects such as fatigue, poor concentration and depression. So, always wear headgear on the rugby field, and a helmet for cycling, scootering, skateboarding, motorsport and horse riding. If you have a head knock, follow your doctor's advice for reducing the risk of further head injuries to avoid cumulative negative effects. Think about noise injury, too. Your hearing can be damaged by long-term exposure to loud noise at work or recreationally, or by short-term exposure to loud music at a concert, for example. Regardless of the cause, hearing loss is associated with an increased risk of cognitive decline. So, protect your hearing and protect your head.

**6 Breathe**  
This seems obvious. Most of us don't have to think about breathing. But taking a few minutes each day to pay attention to your breathing is a simple way to calm your mind and manage stress. Mindfulness practices for stress reduction can improve cardiovascular health, which, in turn, is good for brain health. Smoking and vaping are some of the worst things you can do for your brain. So, get help to quit or, better yet, don't start.

**7 Play**  
Have fun. Connecting with friends and having a laugh are some of the simplest things we can do for our mental and emotional well-being. Social connection is essential for good brain health, too. Getting together with friends makes being active, eating well, and learning new things much more fun. Yes, it was a challenge during the Covid-19 lockdown, but that's made us realise how important it is.

Professor Cathy Stinear is a neuroscientist in the Faculty of Medical and Health Sciences and a member of the University of Auckland's Creative Thinking Board.



## VOICE OF EXPERIENCE

Emeritus Professor Jack Woodward was born in 1926, so has lived through many societal hardships. He reflects on the challenges created by Covid-19.

“Infectious diseases are part of our lives.”

Personal experience over a long life inevitably affects my reaction to the coronavirus pandemic. I grew up between the wars in a small town in the North Island. One-tenth of New Zealanders served during the Great War: 17,000 young men died and 41,000 were wounded, many grievously. The annual Anzac Day parade at the Cenotaph, in my memory always held in drizzling rain, was a time for deep grieving. Times were hard even before the country’s descent into the Depression. The transformation heralded by the election of the first Labour Government in 1935 was wonderful beyond belief. Michael Joseph Savage was deified, Uncle Scrim preached ‘social justice’ in his Sunday evening broadcasts, and the seeds of the Welfare State and our national health service were sown. I was incredibly privileged to grow up during the decades when these principles were still the dominant drivers of our society.

## TOGETHER AGAIN

Prior to Covid-19, Golden Graduate lunches were a much-anticipated occasion and we hope that time will come again soon. A Golden Graduate has either graduated from the University 50 years ago or has turned 70 and the University recognises this milestone at events around the world. Late last year, in Kota Kinabalu, Malaysia, one of our Golden Graduates decided to recreate a photo he’d had taken with two University of Auckland friends in the Parnell Rose Gardens in 1968. William Koh Poh Wah (left) is the Golden Graduate while his friends Pun Chun Ming (centre) and Robert Ching Kau Jai (right) will join the club in the next couple of years. A golden moment indeed.

1968 at the Rose Gardens, in Parnell, Auckland



After a gap of more than 50 years, re-visited



2019 in Bandar Kota Kinabalu, Malaysia

When nuclear bombs were dropped on Japan, I was an Engineering student at Canterbury University College (CUC). I graduated with a University of New Zealand degree, as did all New Zealand graduates until university colleges became autonomous in 1961. That, and my subsequent service as a professor at Auckland, means that I am an Auckland Golden Graduate. Furthermore, half my final year class at CUC were from Auckland University College, which was not yet accredited to award electrical degrees, until, I think, Gordon Bogle was appointed as the first Professor of Electrical Engineering. I succeeded him in 1977.

My first job was with the State Hydro Electric Department which, together with the Ministry of Works, built the hydroelectric system that is still the renewable core of our energy supply. I went on to Canada to work in industry and then study. The unfamiliar sight there of beggars on the streets shocked me, but many beggars and homeless people now occupy the streets of Auckland.

Infectious diseases are part of our lives. In 1937, my wife, Mary, drove with her family from Kaitaia to their new home in Invercargill during one of the polio epidemics, a trip complicated by travel restrictions. Schools and cinemas were closed. Around 700 young people were paralysed and 46 died that year. Regular epidemics persisted until an oral polio vaccine became available in 1961. People important to me still suffer from the crippling effects of polio.

In 1940, my young sisters contracted scarlet fever, a deadly epidemic disease until the advent of antibiotics. One suffered the complication of acute rheumatic fever. Other diseases such as tuberculosis, typhoid and measles exhibited the same epidemic cycles until they could be brought under control.

Containing this novel coronavirus until a vaccine is developed poses a massive challenge. Infection by Covid-19 will be disastrous for underdeveloped countries lacking functional public health systems. One such is Papua New Guinea (PNG), where I worked for seven years at the PNG University of Technology. Involvement with rural aid projects has taken me back often to PNG.

We know that New Zealand will be changed massively by the pandemic. I hope that the country my grandchildren and great grandchildren inherit can be sustainable, fair and carbon neutral. In its own way, Covid-19 provides that opportunity.

Emeritus Professor Jack Woodward is a former HoD of Electrical and Electronic Engineering, and was also a member of the University Council and a Pro-Chancellor.

# TAKING IT IN THEIR STRIDE

The inaugural Kupe Leadership Scholars have come a long way.

**S**tephanie Cooper, one of 16 Kupe Leadership Scholars in 2019, isn't letting a pandemic send her off-course. It may just be a matter of delaying her postgraduate study until the world settles down.

Stephanie has had offers from UK universities to do her masters in psycholinguistics.

"Because of Covid-19, I'm not sure if I'll be able to get over there to start in September ... time will tell. If I have to stay in New Zealand, I'm hoping I'll be able to start my studies online for at least the first semester and then head over in January. That might mean my classes are in the middle of the night but at least I'll be making progress on something. It might even save me some money, so there's always a silver lining."

She says as well as the financial help from her sponsor and mentor, her fellow Kupe scholars had a big impact on her. "They really opened my mind to different ways of thinking, and I loved all the time we spent together in workshops."

Being in lockdown reduced the options to earn to save for her postgraduate study, but the scholarship funds have helped. And there's been a flipside. "It has been nice to have a break before I jump into a few more years of postgrad. Before the lockdown I was working my usual part-time jobs, as well as doing some work for a literacy research project in primary schools. That work was put off for a while, so at Level 3 I started a new job as a nanny. We also opened our bubble to do some childcare for my baby nephew ... it was so nice to spend time with him."

Stephanie is thinking ahead to her dream job. "Ideally, I'd be working at a university as a professor of psycholinguistics. I like the idea of balance between research and lecturing. I've also always been passionate about equity and listening to marginalised voices in science, so I'd love to work on university equity committees as well. I had a chance to see how the Faculty of Science Equity Committee works when I was part of the Science Students' Association, and I definitely want to be part of something like that."

Another 2019 Kupe scholar, KDee Aimiti Ma'ia'i (BA, Honours), became the first Pacific woman to be awarded a Rhodes Scholarship to Oxford. "The academic year at Oxford begins in October. They anticipate face-to-face learning to resume then, but I've been playing it by ear. In the scheme of disruptions impacting

people's lives, my studies being delayed is not a large issue. It will be what it will be and I'm grateful to have the opportunity – no matter when it happens."

KDee will do a masters in global and imperial history before beginning her DPhil, the Oxford equivalent of a PhD. "Finding supervisors for my chosen topic, Pacific development, was a challenge, so I've opted to do the same project I would have done in Development Studies but in History under the supervision of James Belich. My research is interdisciplinary, so I'll be able to take part and publish in the likes of public policy, international development and history, for conferences, seminars and journals.

"I had also intended to begin my talanoa-based research throughout the Pacific before my departure. That obviously can't happen because of the border closures, but that just means I will have to come back home more frequently – no complaints on that front from me!"

KDee has been working in the University's student engagement and development team in the Faculty of Arts ahead of her Rhodes Scholarship. She was delighted to receive messages from John McCall MacBain, the funder of her scholarship. "He was a Rhodes Scholar, too, so he has been sending encouragement and advice ahead of my time at Oxford."

Surita Manoa (BAS) had been offered a role with an architecture firm in Los Angeles for 2020 but that was cancelled, as was the job she'd just begun at Auckland Council.

"I can still pursue overseas work in a few years," she says philosophically. "I've ended up using isolation time to pursue my own creative endeavours and I'll be looking for a long-term architecture job once lockdown is over. My mentor, Pip Cheshire, has been in touch to offer some advice as to where I should apply."

Olivia Soesbergen completed her masters in public policy in November and began a 'dream job' in June. She's working for the Government in a senior advisory role focusing on disability rights.

She says the Kupe scholarship helped her understand the true meaning of leadership.

"I learnt that leadership wasn't a basic set of skills, it's a way of being. We had the privilege of meeting many New Zealand leaders who all spoke of a similar theme: the importance of serving others. It brought me to the realisation I wanted more than to 'climb a career ladder'. I want an occupation that allows me to make a positive impact on others' lives. My mentor, Minnie Baragwanath, is a pioneer for accessibility in New Zealand and taught me it's possible to transform a passion into an occupation and improve the lives of many in doing so."



From top: Olivia Soesbergen, Stephanie Cooper and KDee Aimiti Ma'ia'i.

## Kupe Leadership Scholarships

The prestigious Kupe Leadership Scholarships offer exceptional students financial support from sponsors and mentorship in a postgraduate year. Up to 20 are awarded each year. All the 2019 scholars, funders and mentors can be seen at [auckland.ac.nz/2019-Kupe-Scholars](https://auckland.ac.nz/2019-Kupe-Scholars)

The 2020 scholars were announced in February and although their first official event was put on hold, during Level 4 lockdown they held online events with influential opinion leaders talking about Covid-19. Read about 2020's scholars, funders and mentors at: [auckland.ac.nz/2020-Kupe-Scholars](https://auckland.ac.nz/2020-Kupe-Scholars)

# PACIFIC GLAM

By Linda Tyler

Kupe scholar Ane Tonga, the new Pacific Art Curator at the Auckland Art Gallery, has all the skills to lead.

**I**n late 2019 Fine Arts and Art History graduate Ane Tonga was appointed to a new curatorial position dedicated to Pacific Art at Auckland City Art Gallery.

Ane is the inaugural appointment to the role, but many believe her position is long overdue, since Census statistics show about 200,000 people from 30 Pacific groups live in Auckland – about two-thirds of the country's Pacific population. The Pacific Art Curator role has come about through funding from private benefactors who make up the Auckland Art Gallery Foundation.

"The creation of the position reflects the gallery's commitment to Pacific communities," says Ane. "Curatorial roles are rare, particularly those related to contemporary Pacific art. That's something pointed out to me by a mentor and senior Pacific curator, who told me, 'I'm glad this day has finally come around. I hope this sets a precedent for us as Pacific people to continue telling our own stories'."

Pacific people are not represented in great numbers in the collection. An online search turns up 71 works, most without images, in the gallery's database of 15,000 items. Ane is set to change that and also to encourage regular Pacific visitors to the gallery, once lockdown is over and public spaces become the norm again.

The aim of her position is to give greater visibility to Pacific narratives in the gallery's collection, as well as increasing access and engagement with Pacific art and artists.

"I was surprised that there was relatively little discourse focused on curatorial practice in Aotearoa and found even less related to contemporary Pacific art," says Ane. "Tracing and arguing for Pacific curatorial practices has given me a better understanding and appreciation for the work of others who have paved the way for me and others to find a place in the galleries, libraries, archives and museums [GLAM] sector."

Ane's family is from Tonga, although she was born in Auckland. Like thousands of others from the Pacific Islands, her parents came to New Zealand in the 1970s to give their family better opportunities. Ane excelled at Epsom Girls' Grammar and gained a place at Elam in 2007 where she developed a photographic practice but also curated her first exhibition. As a Tuākana mentor at the University, she connected Māori and Pacific art students and organised



Photo: Elise Manahan

an exhibition at Art Station in Ponsonby Road.

"Becoming a tuākana provided an opportunity to learn about Indigenous frameworks that continue to play a role in many facets of my life," says Ane. "There's mutual respect and learning that happens between a tuākana and teina."

Completing her honours studies with papers in critical thinking, Tongan language and contemporary Pacific art in 2010, she then took the Blumhardt Curatorial Internship at the Dowse Art Museum in 2012. It resulted in an exhibition of photography, sculpture and digital art by Korean, Māori, Samoan and Pākehā New Zealanders, including two of her former teachers at Elam, Sean Kerr and Michael Parekowhai.

Ane became assistant curator of contemporary art at Te Papa Tongarewa, then completed a postgraduate diploma in museums and cultural heritage. An exhibition of her photos of nifo koula – gold-plated teeth – at the Gus Fisher Gallery in 2014 drew acclaim. She was Dunedin Public Art Gallery's curatorial intern in 2015, and then lead exhibitions curator at Te Whare Taonga o Te Arawa. She later returned to Auckland to work as a tertiary teacher and freelance curator.

Her recent curatorial projects, a survey of arts alumna photographer Edith Amituanai at the Adam Art Gallery and two exhibitions at Objectspace – a representation of alumna Ani O'Neill's sculptural works from the 1990s and embroidery by refugee Lema Shamamba from the Congo, have been acclaimed as both sensitive and significant. She has undertaken them while writing her MA thesis on Pacific curatorial practice in New Zealand between 1965 and 2019, supported by a Kupe Leadership Scholarship in 2019. She took up her new role on 2 March, somewhat unfortunate timing in light of what was to occur on 23 March. She's cheerful about it. "I've used the time to work on projects, write and maintain a supportive role for our artists and our communities."

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Ane Tonga became the inaugural Pacific Art Curator at the Auckland Art Gallery in early March.

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**“Curatorial roles are rare, particularly related to contemporary Pacific art.”**

– Ane Tonga, Pacific Art Curator, Auckland Art Gallery



# VACs scene

**T**he University of Auckland has an alumni and friends network of more than 200,000 across the globe. There are 50 volunteer alumni coordinators (VACs) in 36 cities, who help with welcoming new alumni to their city and organising events in that region.

One such VAC is Ricardo Hernandez (MSc, geography), who has been a VAC in Perth and now Brisbane. There are about 1,000 Brisbane alumni and he's hoping to work towards a get-together after the social distancing restrictions are eased.

"We were scheduled for our launch event in April, but then Covid-19 happened!"

Jennifer Ma (BCom/LLB) is a Beijing alumni coordinator and helps organise events there, but was in New Zealand for lockdown. She says the Beijing alumni group uses the Chinese social media platform WeChat to communicate.

"WeChat makes it easy to keep tabs on what is happening and to take the pulse of how people are feeling across the different countries."

There are about 400 alumni in Beijing and 300 in the WeChat group. "There was a donation drive organised by one of the members to donate medical equipment to Wuhan when it was in crisis mode. And some alumni organised medical equipment to send here to New Zealand."

Jennifer says she can't wait for a regular alumni event to be possible.

"I think a lovely non-social-distancing meal would be a welcome relief to all, to simply just sit together as a group and catch up in person over a meal not cooked by oneself!"

She describes Covid-19 as a pivotal, defining point in our human history that will no doubt change the understanding of how we should proceed.

"So it would be really interesting to organise



Jennifer Ma is a Beijing volunteer alumni coordinator, but has been in New Zealand while travel restrictions remain.

a discussion or roundtable where we invite people from across industry sectors and walks of life to share the changes they have made and foresee. There are so many interesting issues to discuss – the changing business landscape, technological integration into our everyday lives, privacy, nationalisation vs globalisation and social good."

She says being part of a group of alumni in Beijing is important to her. "What I've enjoyed is connecting with people who I'd never have otherwise had the chance to meet in Beijing."

"Two highlights were the Alumni BBQ in 2018 and the global Volunteer Impact Week project I organised with a local children's leukaemia hospital. I also facilitated the Beijing Alumni & Friends panel event on sustainability in 2019."

"In many ways, being involved in those events represents what being UoA alumni is all about. Chilling out together, and meeting people from all walks of life who have since made Beijing their base. It's those moments of laughter, connection, service and impact and having a fundamental understanding that we have a bigger role to play."



Ricardo Hernandez is a volunteer alumni coordinator in Brisbane.

## UPDATE YOUR DETAILS TO BE IN TO WIN AN IPAD

Stay informed about alumni news through our emails with exclusive offers, competitions and information about events happening near you. To stay in touch, we need your up-to-date email and postal address. If you update before 31 August 2020, you'll go in the draw to win one of five Apple iPads.

Head to [alumni.auckland.ac.nz/update](http://alumni.auckland.ac.nz/update) to check your details are current or fill out the form that came with this magazine.





Michele Leggott has embraced online teaching in the same way she has adapted her style of poetry writing – through necessity.

## Moving with THE TIMES

After nine books of poetry, Professor Michele Leggott has selected moments in time for a new collection.

**M**ezzaluna, *Selected Poems* covers 30 years of poetry by Professor Michele Leggott, former New Zealand Poet Laureate.

“Each of my poetry books reflects a certain part of my life, not always autobiographical, but it does reflect what I was doing and what I was interested in,” says Michele.

Her style of writing, and subject matter, has changed over the years, in part necessitated by losing her sight, and the collection reflects this. In 1985, she was diagnosed with a mild form of

retinitis pigmentosa (RP) or night blindness. But in 1994, she was diagnosed with a more severe form of RP. It gradually destroys cells in the retina that are responsible for colour vision and fine focus.

“It’s best to deal with each stage of the decline as it happens and to figure out ways around it. That’s why I’m happy to talk about it, but I’ve never wanted to be pigeonholed as a ‘blind writer’ or a ‘blind lecturer’. It’s part of who I am. It’s part of what I do.”

Michele has earned many accolades over the years, including the Prime Minister’s Award for Literary Achievement in Poetry, the New Zealand Order of Merit and the inaugural New Zealand Poet Laureateship in 2007.

Her earlier books reflect the modernist tradition – poems with long lines, long gaps and no punctuation. “When I was starting out, I liked to create really complex poems, because that’s what modernist poets do,” she says. “I made the decision to have less punctuation and more spacing. What it gives me is uncertainty ... the ability to stretch the language. I’m not bound by convention.”

But the loss of her eyesight meant she had to change the ‘shape’ in which she wrote.

“From 2012, I learned how to work with audio software. But because screen readers are set up for normative punctuation, I couldn’t make it read the lines that didn’t have punctuation.

“It was driving me mad because I could write the poems, leaving the gaps in my mind’s eye. But when I came to read them, the screen reader wouldn’t give me the pauses that were the white spaces. I was appalled that I couldn’t find a way out of that corner the screen reader had put me into. But in the end, it gave me a new way of writing ... prose poetry.”

While the University has been closed, Michele has embraced the opportunity for a new way of teaching, too. “Zoom classroom is amazing and the best tool we could have been given. It took a while to get used to the format, but our poetry students are with us in real time, they can see and talk to each other and that is a huge benefit.

“But I’m glad we got three weeks in the physical classroom before having to take everything online. It means students have had time to work with each other’s poems and develop trust that is needed for creative-writing peer review.”

### *Mezzaluna, Selected Poems*

(Auckland University Press) RRP \$35

**WIN:** We have one copy of *Mezzaluna* to give away. **Email:** [ingenio@auckland.ac.nz](mailto:ingenio@auckland.ac.nz) by **1 September.**



# Change of MINDSET

In the CD section of the Warehouse at Whangaparāoa, musician Jason Bae found inspiration. Now he performs around the world. Well, he did.

**S**outh Korean-born New Zealand pianist and conductor Jason Bae went from travelling intercontinentally twice a month for three years to sitting alone in an Auckland apartment for seven weeks.

"I arrived with one bag of luggage. I was only going to be here for two weeks, then was due in Sweden and Turkey before my new role at the University in Semester One."

Jason was set to teach the School of Music's piano performance students and run its performance classes, and was excited to return to his alma mater. "The University had also asked me to lead the rehearsals for the School's graduation gala, but that was cancelled, too."

On top of that, the maestro pianist was set to become a conductor in the NZ Symphony Orchestra (NZSO) Fellowship Programme.

Jason is philosophical about it.

"Within 36 hours of arriving, which I did the day before New Zealand closed its border to flights from Korea, I cancelled all my events and decided to stay here for a year," he says. "Amazingly, I got an apartment the next day."

John Eady, from Lewis Eady Ltd, offered Jason the use of a digital keyboard for lockdown.

"So, I was able to keep teaching my University students via Zoom. It's a good time for me to focus on young people at the University, but I'll also be trying to learn as much as I can with the professional musicians here such as in the NZSO. I'm particularly excited to be under the guidance of its music director, Hamish McKeich."

Jason had kept his passion for becoming a conductor in his heart for a long time, even while doing his masters in piano at the Royal Academy in London. The idea was sparked in him as a 16-year-old.

"I'd been watching conductor James Judd at the NZSO and then Finnish conductor Pietari Inkinen arrived. He was 28, which is my age now. I was

amazed how much difference another person on the podium could make. The NZSO sounded completely different. So that was a magical moment for me. I got hooked immediately – I remember his charisma, his leadership and especially his musicianship."

Even so, he made a decision to continue with his piano studies in London. "I didn't want to be a conductor who hasn't mastered his instrument. I wasn't happy with my playing then and knew I needed a few more ingredients from different cultures and experiences."

He graduated with the highest mark in his masters class and, during his final lesson, told his professor, Christopher Elton, that he wanted to become a conductor. "He said, 'Jason, I always knew you would be'. It was very touching, knowing he still trained me to be a top-level international pianist. I'm so grateful for that."

Jason says recent changes at the School of Music seem to be moving it away from the conservatory model and broadening students' minds. "They will be more knowledgeable than me when I was a student. I had to seek out inspiration from the Warehouse in Whangaparāoa. I bought all the CDs with piano music on them. Everything was \$1 – a bargain! That was my inspiration."

Jason says students are likely to be stressed after Semester One and the fact they couldn't enter competitions, travel or practise in ensembles.

"When I studied here, I didn't miss any classes and I put in extra effort to go to international competitions. I was determined to get an outside view as well as being nurtured here. To be an expressive artist, you have to learn from others."

"I'm trying to get inside New Zealand students' minds and make them think about that. If I get the chance in Semester Two, I'll say, 'so that was Semester One in an extraordinary circumstance, what can we achieve from July?' That could be a good focus."



Jason Bae is a University of Auckland '40 Under 40' performer who is teaching School of Music students.  
Top photo: Kelly Eady Loveridge.  
Photo above: Aiga Ozo

# Always a new chapter

Not so long after historian Neill Atkinson's publisher released the latest version of his *Today in New Zealand History* book, another chapter wrote itself. Covid-19 lockdowns will no doubt be added to any update in coming years – given the unprecedented impact on life as we knew it.

Auckland alumnus Neill has the kind of job many people would love: delving into New Zealand history to uncover facts about everything from the quirky characteristics of our social history to trends in transport.

Neill did his MA in history at Auckland and is now the Chief Historian for Manatū Taonga Ministry for Culture and Heritage (MCH) in Wellington.

When he first headed to Wellington in 1990, he worked on the *Dictionary of NZ Biography* (now part of the Encyclopaedia of New Zealand, [teara.govt.nz](http://teara.govt.nz)) with Claudia Orange, Auckland alumna.

In the early 2000s, there was a move to publishing more content online, especially via [nzhistory.govt.nz](http://nzhistory.govt.nz), which was launched more than 20 years ago, and then Te Ara. Neill has worked for MCH since 2002 and been its chief historian since 2011. There are seven historians working at the Ministry, along with content writers, web designers and developers, which all leads to an extraordinarily rich online resource that attracts a lot of international traffic as well as local.

But that's not to say people don't buy books. In fact, this revised edition of *Today in New Zealand History* is in its third edition since 2017.

"It has sold well, so the publishers were keen to update it," says Neill.

The March 2020 update includes the Christchurch massacre of 15 March, 2019 and the Silver Ferns winning the Netball World Cup on 21 July, 2019, among others.

"One of the things that's good about doing a book like this is that it connects with what we've been doing online at NZHistory," says Neill.

"The website has had a popular 'Today in History' feature for many years, which people

really enjoy and share across all media, including Twitter and Facebook."

*Today in New Zealand History* features photos and illustrations for each date entry, many of which are from the Alexander Turnbull Library. Part of the appeal is the interesting juxtaposition of items, such as you might find in three days in September. On 15 September the first steel was produced at Glenbrook Mill (1969) and Jean Batten was born (1909); 16 September was when the first NZ rugby team toured the northern hemisphere (1905); and 17 September was when flogging and whipping were abolished (1941).

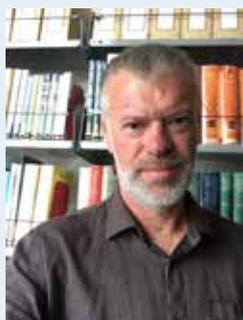
"It was interesting deciding what went in," says Neill. "We certainly didn't want it all to be politics, disasters and war. There needs to be diversity, so some pretty tough decisions had to be made over what to include in the book. It's not like online where you can have multiple events listed for the same date – in the book we were mostly limited to one event per day, although for some dates we included two, such as Anzac Day.

"The hard thing has been to try and use some of these one-off events to tell a deeper story. The form of the book has its limitations, but it's meant to serve as an engaging introduction, to draw people in to our history."

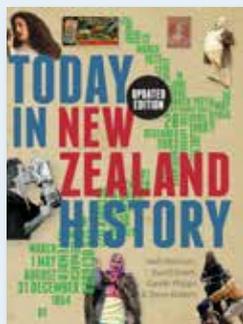
And there's humour. If you're wondering about the date of the first Jockey Y-Fronts in New Zealand, that would be 16 March (1940). And 29 September (1947) will be remembered as the day West Coast publicans regretted increasing the price of their ale. The great beer boycott of Greymouth ensued.

With plans to introduce a compulsory history component into the New Zealand school curriculum in the coming years, having this book sitting around at home may spark interest in young minds.

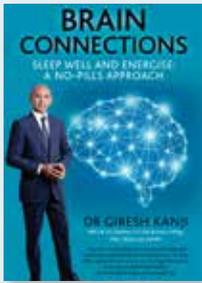
"Lots of schools already use the NZHistory site and Te Ara," says Neill. "This book complements those resources. It's an unashamedly populist way to provide people with bite-sized chunks of New Zealand history. Hopefully, they'll then go online or to history books to explore further."



Historian Neill Atkinson has created an 'unashamedly populist' book of bite-sized excerpts of our history.



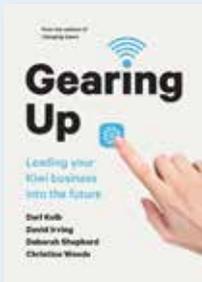
*Today in New Zealand History* (updated edition) Neill Atkinson, David Green, Gareth Phipps and Steve Watters  
Exisle Publishing, \$39.99



### Brain Connections – Sleep Well and Energise: a No-Pills Approach

Honorary associate professor Dr Giresh Kanji's top-selling book on sleeping well without pills was popular in lockdown. The musculoskeletal pain specialist also gave free webinars to help people having problems with sleep.

E-book, kindle and book through [gireshtkanji.com](http://gireshtkanji.com)

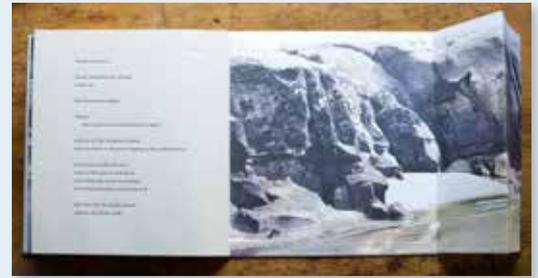


### Gearing Up: Leading Your Kiwi Business Into the Future

Darl Kolb, Deborah Shepherd and Christine Woods from the Business School team up with retired colleague Professor David Irving (co-founder of Icehouse) in this practical book to help businesses facing an uncertain future. The authors' 2013 book *Changing Gears: How to Take Your Kiwi Business from the Kitchen Table to the Board Room* was a big success. **We have one copy of Gearing Up to give away.**

Email: [ingenio@auckland.ac.nz](mailto:ingenio@auckland.ac.nz) by 6 September.

**Darl Kolb, David Irving, Deborah Shepherd and Christine Woods, AUP, RRP \$29.99 (9 July)**



### Watermarks

Poet Riemke Ensing is a former English tutor at the University, and was also an honorary research fellow. Now 81, she has put out a limited-edition (120 copies) artistically printed book called *Watermarks*, featuring two poems about Muriwai and dramatic vitreographs of the Muriwai coast, from photos taken by Claire van Vliet. The book is 265mm x 290mm and can be read page by page or by unfolding it like a concertina.

**Riemke Ensing, The Janus Press (US)**

**\$350 + p&p from [www.ensing.co.nz](http://www.ensing.co.nz)**

## Sonnets and squirrels

By Sophie van Waardenberg



Alumna Sophie van Waardenberg is doing a Master of Fine Arts in Creative Writing at Syracuse University.

In 2019, a few months after I'd completed my BA (Hons) in English and History at the University of Auckland, I moved to the United States to begin a three-year Master of Fine Arts in Creative Writing at Syracuse University.

Syracuse is a city in upstate New York, around the size of Hamilton, a little bit like Hamilton, even, but with snowdrifts and groundhogs and diners, and I spend my days here writing poetry, reading a whole lot, and attempting to source good coffee. It's an embarrassingly good life.

I'm on a generous fellowship offered to everyone in the MFA programme, and I've been lucky in myriad ways with the creative writing programme here, but what really gives this degree its worth is the face-to-face, shorthand critique and support from the other writers and classmates we've grown to know so well. Through the period of non-contact learning, we tried to preserve that experience – video calling, sharing of materials online, chat boxes, incessant emails – but there's only so much a community can do to survive and to offer comfort when physical interaction is off limits. The 30 of us across the three years of the degree were used to sitting in ergonomic swivel

chairs next to each other every day in fluorescent classrooms. But next, like so many students and faculties across the world, we wouldn't be back on campus for a long while, and those squinty classrooms took on a dreamy haze.

It was also a lonely experience being so far from home at a time like this. I'm incredibly fortunate to have a safe and comfortable place to live, where I can go about my quiet life quite easily, but at times I feel as though I'd give my last cup of flour to be at home in Auckland with the people I love, or to be in New York City where my partner is cooped up away from the chaos.

For now, though, I'm writing claustrophobic sonnets, photographing squirrels and looking forward to some day in the future, maybe a warm one, when I can sit on the stoop and have a terrible cheap beer with my friends.

### How is everything going? I hope you are well

how is everything going? I hope you are well. I have tidied just for you my bedroom, polished the leaves, and the squirrels are wriggling. let me play you a song. hear it? I can't either. I'm sorry. the internet

is tired, and nobody's dying, except the people who are dying. the long stems of the nameless flowers I bought you are green in a rude way. I press a petal to my cheek, and I think: it's as soft as a girl. this is not at all like we had planned.

I've cancelled the flights. I've frozen the bread. we're all all alone. this is not the worst we will ever feel. this is not the deepest loss but come when you can, darling, or love, or partner, or emergency contact.

Sophie van Waardenberg

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