

WAIPAPA TAUMATA RAU, UNIVERSITY OF AUCKLAND

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ALUMNI MAGAZINE

—
SPRING 2022
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YOUTH MENTAL HEALTH

Research provides
hope for the future

TAKING ISSUE

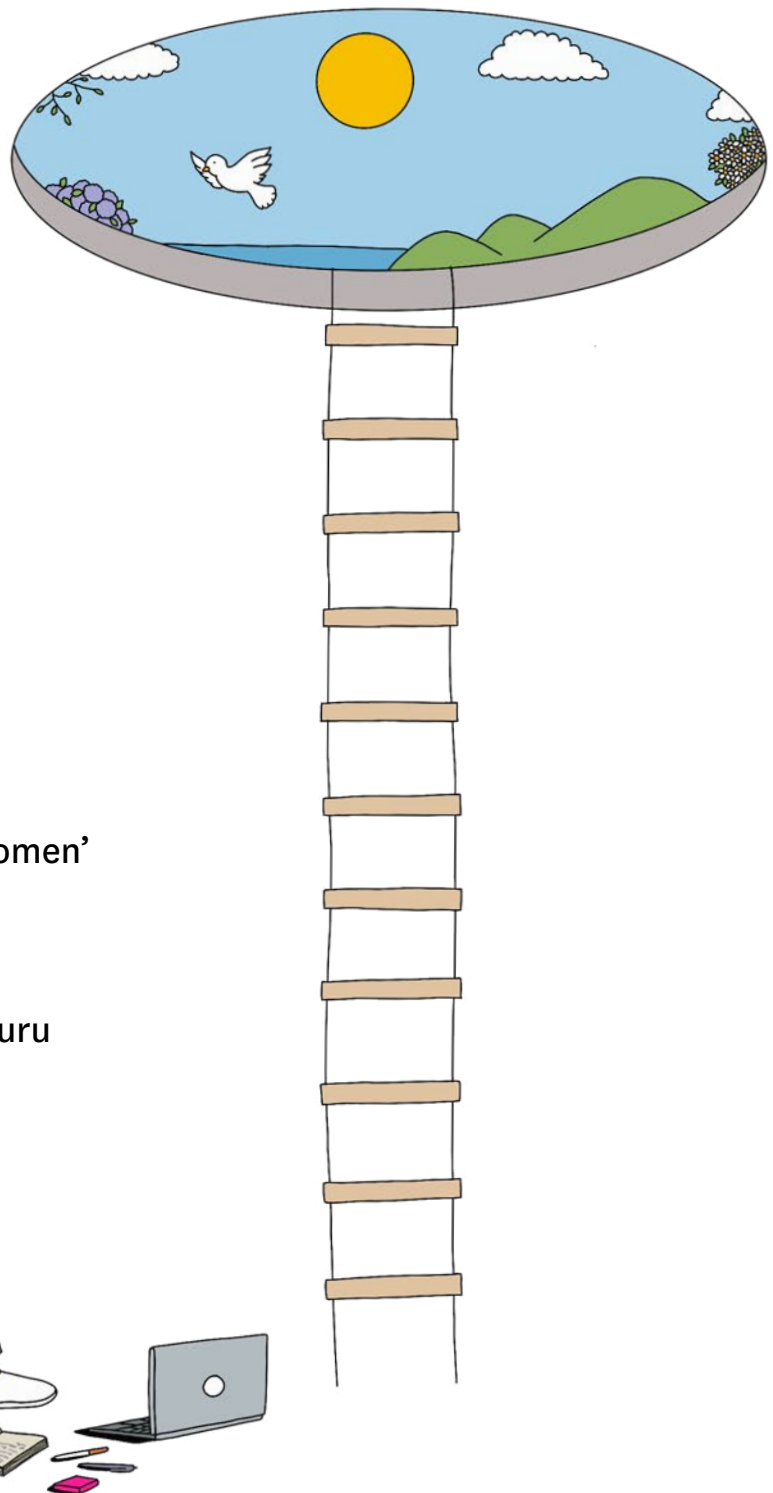
Is being predator free
by 2050 realistic?

TOP JUDGE'S PROMISE

'We won't forget Afghanistan's women'

FOCUSING ON HER VISION

Optometrist turns sharemarket guru



BIG PICTURE

THE UNIVERSITY OF AUCKLAND
THIS PLAQUE COMMEMORATES THE
OPENING OF THE SCHOOL OF MEDICINE
BY HER MAJESTY THE QUEEN ON THE
TWENTY FOURTH DAY OF MARCH 1970



CAMPUS MEMORY

Her Majesty Queen Elizabeth II (21 April 1926 – 8 September 2022) officially opened the University of Auckland's School of Medicine on 24 March 1970.

this issue

16

Brain gain

Professor Chris Shaw is a neurologist bringing his skills back to New Zealand after 17 years

17

Vision Bus gets into gear

A mobile eye-testing unit being run by the School of Optometry is already saving sight

22

War in Ukraine: unclear endgame

Expert analysis of a dangerous trigger point for widespread global conflict

24

Top judge's promise: forget no one

Dame Justice Susan Glazebrook speaks about the plight of female judges in Afghanistan

25

Committed to a cause

Bernard Sama says we need to better treat people with refugee and protection claims

29

Power and passion

Glen Dromgoole is reaching new heights with his electric chopper in the US

30

Reimagining democracy

How everyday citizens can have a stake in reimagining the future

32

Natural connections

The 100-year commemoration of the Auckland University Field Club was the chance for special catch-ups

REGULARS

6

Editorial

13

Guest columnist:
Richard Pamatatau

14

News

20

Research

26

Taking Issue

28

Seven Tips

33

Golden Graduate

34

Around the Globe

36-41

Art and Culture:
music duo Ersha Island;
author Sonya Wilson;
Simran Kaur;
and books by other
alumni and staff

42

Connection Points



SUSTAINABLE

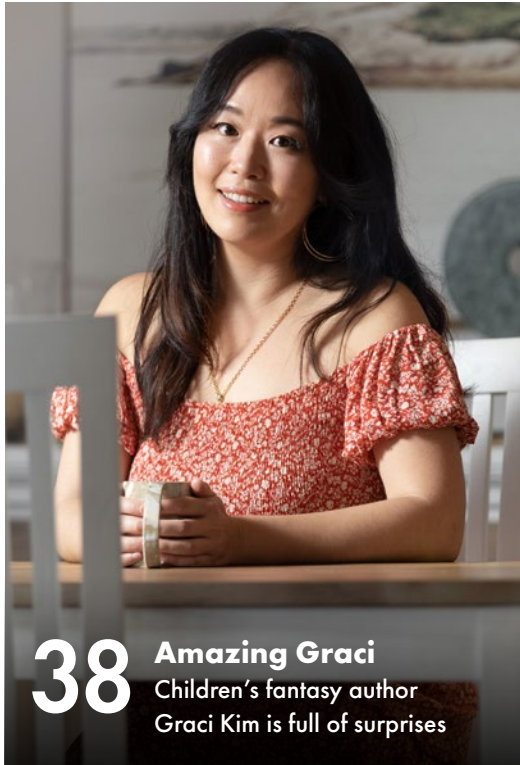
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7 Blue sky thinking
Terryann Clark and the mental health researchers trying to help our youth



18 Game changer
Justin O'Sullivan and the Liggins team say genome technology can improve sick babies' chances



38 Amazing Graci
Children's fantasy author Graci Kim is full of surprises



37 Inspired by ancestors
Te Kapua O'Connor and the importance of great role models, then and now

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Editorial

UP FOR THE CHALLENGE

As our students become graduates and alumni, it is a time to think about the world they're moving into, beyond the environs of the University.

The world of our 2022 graduates is vastly different from that of their recent predecessors. It is shaped by a pandemic, war and conflict, inflation, protectionism, disruption and fragmentation, polarisation, inequality, disinformation and climate change. As graduates move into a job market hungry for talent, their world is complex and challenging.

They are not the first to graduate into difficult times and we know that among their ranks are alumni who will meet these challenges head-on and make the world a better, safer place for all.

The same challenges facing our graduates and our students are shared by the University, our communities and society. As we implement *Taumata Teitei*, our Vision 2030 and Strategic Plan 2025, these global challenges, with their unique Aotearoa New Zealand manifestations, will shape our path forward. We have been living with disruption for some time and have seen its impact on the education, travel, media, retail and energy sectors. The pandemic accelerated this disruption and now it is challenging us.

We must respond to these turbulent new realities as we face a financial and carbon-constrained future. Employers want high-quality graduates to be work-ready. At the same time, there is greater competition, some of it reaching into New Zealand from overseas universities.

It means that, as this University's leaders look to the future, we must forge fresh approaches to what we do while remaining committed to our core values of respect and integrity, excellence, service and quality.

We are re-examining how we support equity students and how we prepare students to navigate complex and changing work environments. Our students are not a single group for whom we can deliver a one-size-fits-all study option. Our students are living lives in which they can eat, bank and shop at any time of the day or night.

Some work long hours to fund their study, others have care obligations, and others are



working and need to upskill. As they demand flexibility from us, we must reassess their changing needs and emerging digital ecosystems. We are working to transform our curriculum to meet the future needs of a diverse student cohort committed to lifelong learning.

A central aspect of this future curriculum will be to develop work-ready graduates. We already offer online professional masters courses for our full-time professional working students.

Sustainability has been a focus for many years, yet we know we have a responsibility to act with more urgency and do more to meet our ambitious carbon-reduction targets by 2030. This will put us on a solid net-zero trajectory to help limit global warming to 1.5 degrees Celsius above pre-industrial levels. Our carbon inventory shows that our single largest contributing activity is air travel. Inbound international students and work-related air travel together produce more than 80 percent of the University's greenhouse gas emissions. This information alone highlights the challenges we face to meet our target.

To realise our sustainability aspirations, we must make cultural and systemic shifts in how we work, think and interact. But we must also recognise the importance for our academics and leaders to leave our shores in the interests of research and global connections. There are difficult decisions ahead of us.

As our globally ranked university strives to remain in the top ten worldwide for Sustainable Development Goal impact, and in the world's top 100 universities, we are focused on quality, equity and sustainability. Driving achievements across these three areas will bring tensions and challenges. Yet we know these tensions will produce the innovations needed to succeed.

In doing so, we will honour our people, communities and environment. We will work to ensure that our institution, students, academics and staff are strong, resilient and prepared to meet the demands of our rapidly evolving world.

PROFESSOR DAWN FRESHWATER

Vice-Chancellor

Waipapa Taumata Rau, University of Auckland

BLUE SKY THINKING

Ideas to tackle youth mental health

There would be few who haven't faced stress and anxiety in this pandemic. But the mental health of young people is of major concern. Experts from the University of Auckland are determined to spark change. By **Owen Poland**

Hardly a week passes without another glaring headline about mental health, whether it be RNZ's 'Mental health well-being worse since pandemic' or the *New Zealand Herald's* 'Child psychiatrists overwhelmed'.

One of the greatest concerns is the rapid increase in mental health challenges among the nation's youth, with 23 percent reporting symptoms of depression – nearly double what it was just ten years ago. Sadly, the suicide rate for adolescents (aged 15-19) is the second-highest of 41 OECD countries, behind Lithuania (Unicef Report Card 2020). University of Auckland researchers are well aware of Aotearoa New Zealand's persistent and pernicious challenge with the decline in the mental health of its young people, a challenge exacerbated by the pandemic.

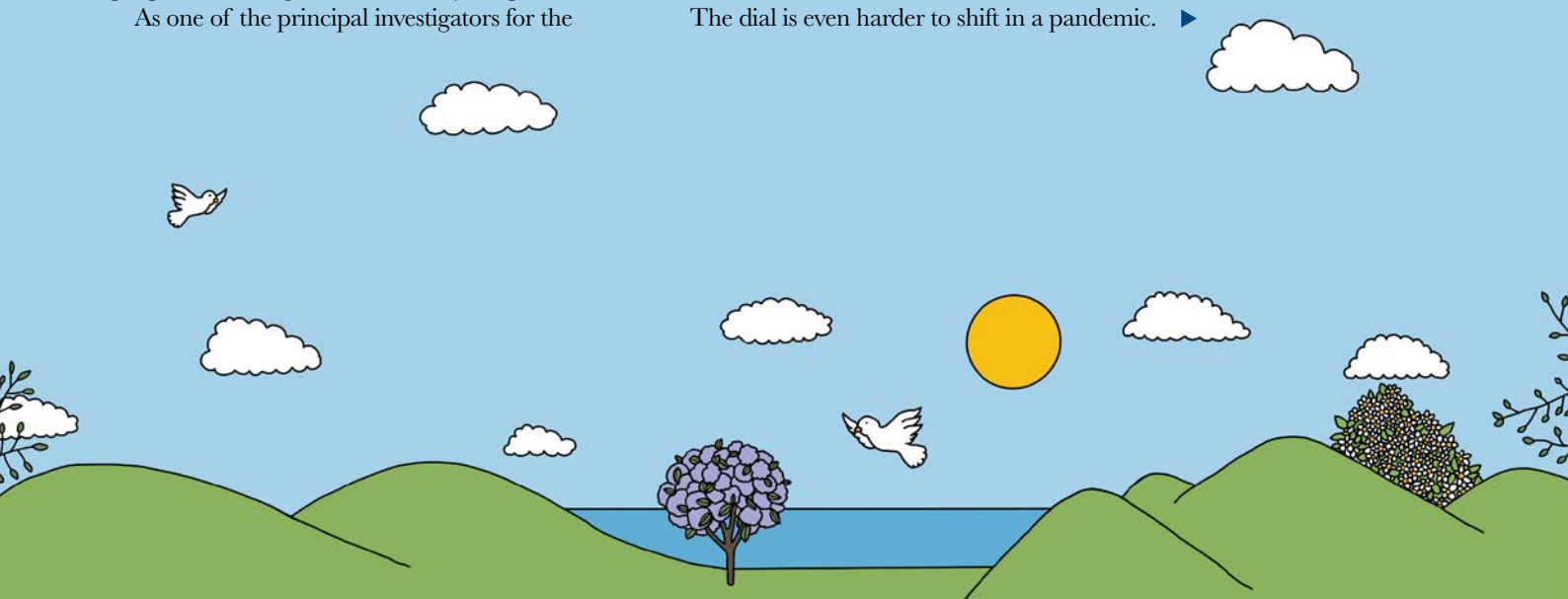
As one of the principal investigators for the

Youth2000 survey series, a research project that ran over 20 years, Professor Terryann Clark says that well before the pandemic there was evidence of a dramatic increase in depressive symptoms among young people. The most recent version of the survey, from 2019, involved around 7,900 young people in a third of the secondary schools in Auckland, Northland and Waikato and was nationally representative of the population.

It revealed 38 percent of girls had significant depressive symptoms, and suicide attempts have more than doubled since the previous survey in 2012 – to 9 percent for boys and 17 percent for girls. The overall rate of secondary students with symptoms of depression rose from 13 percent to 23 percent in seven years.

As well, 27 percent of respondents said they wanted mental healthcare but couldn't access it.

The dial is even harder to shift in a pandemic. ▶



◀ “There’s an increase in young people saying they’re distressed, and they often feel like there are no solutions or they’re feeling quite helpless,” says Terryann (known as ‘TC’), from the School of Nursing in the Faculty of Medical and Health Sciences (FMHS). “Our clinicians and our young people are saying they’re finding things very tough right now. And actually, why wouldn’t they? It’d be crazy if we were all super happy, with a global pandemic happening.”

While lockdowns may have had positive outcomes for some adolescents whose families weren’t worried about housing, food or job security, TC says it could be a really distressing time for families who didn’t have those things.

“If families are stressed, it’s going to impact the well-being of their children,” she says.

The University’s Pro Vice-Chancellor Pacific, Associate Professor Jemaima Tiatia, is a board member on the Mental Health and Wellbeing Commission. Jemaima says digital anxiety caused by hybrid teaching and learning, and social anxiety triggered by having to re-engage at school, are just some of the pandemic-related factors that can increase depression.

Research shows that young Pacific peoples, for example, have the nation’s highest rates of depression and anxiety and are also three times more likely than all young people to attempt suicide. She says the issue has been exacerbated by the worsening socio-economic and health challenges caused by Covid-19 that have led many students to quit education. “Students are dropping out of their degrees or from school because they’re having to work,” she says. “All of these things affect mental health and well-being.”

EARLY INTERVENTION NEEDED

Professor Sir Peter Gluckman, a paediatrician and director of the University of Auckland’s independent think tank, Kōi Tū: The Centre for Informed Futures, says there’s no single reason for the rising numbers of children and teens experiencing depression, anxiety, eating disorders, self-harm and a lack of resilience.

“It’s a complex issue, but it’s a multi-dimensional problem that can relate to the way children are reared, educated, early life experiences and so on.”

Sir Peter says while improvements to mental healthcare are important, both in investment and recruitment, early intervention is the key to change. “If between conception and three years of life the brain is challenged in its development, then it is impaired and, through life, they’ll have deficiencies in their ability to regulate emotions.

“Add to that all the things that happen in adolescence, with society changing boundaries. That puts on more pressure. If early life experiences have impaired psychological resilience, alongside greater stresses in adolescence coming from social media and from living in an uncertain world, then you can see the challenges.”

He says the situation hasn’t just been created by the pandemic. “We have seen around the Western world a doubling to tripling of young people with psychological distress in the past 15 years. This cannot be ignored. It’s not just social media. It’s not just digital media. There have been lots of other sociological changes ... including more maternal stress.

“People think it’s a single problem with a single magic-bullet solution; it’s not. But there’s no use

“There’s an increase in young people saying that they are distressed and they often feel like there are no solutions.”

– Professor Terryann Clark, Cure Kids Chair in Youth and Adolescent Mental Health



Professor Terryann Clark says if families are stressed, it can affect the mental well-being of the child.
Photo: Elise Manahan

waiting until these kids fall off the cliff. We should prevent that by focusing on the early years. We invest poorly in the early years in New Zealand.

“We must also be more willing to think about how the education system, as well as the parental system, can stop children falling off the cliff.

“We have to admit that the environment we’ve created for young people, in all sorts of ways, is not a healthy one.”

At the frontline, child psychiatrist Dr Hiran Thabrew, also from FMHS, sees the mental health toll first-hand at Starship Children’s Hospital. “We had more than 5,500 young people present at hospital with self-harm in the past year.”

While the pandemic is not the only cause, it was certainly a contributor. The grim statistics included a 50 percent rise in ten- to 14-year-olds who came in for self-harm, and a threefold increase in those presenting with eating disorders.

The behaviour of those with autism or pre-existing behavioural difficulties also worsened quickly during lockdowns and there has been a lot more anxiety about returning to school.

“Kids who are prone to anxiety became more anxious and needed longer to settle in,” says Hiran.

There is no easy answer for how to reduce the burden of poor mental health for young New Zealanders. The positive news is that researchers are investigating and trialling a range of responses, from preventative approaches, such as building resilience and community wraparounds, to providing better access to evidence-based advice and support in ways relevant to youth.

Listening to the voices of youth is at the heart of a new study by Koi Tū, led by research fellow Dr Jessica Stubbing. It will explore the issues that contribute to poor youth mental health.

“Anxiety rates are going up. Depression rates are going up, self-harm rates are going up. What we still don’t really have is a great grasp on why,” says Jessica.

The first stage will canvass the views of youth by encouraging them to explore issues and bounce ideas off each other in what Jessica describes as a participatory collaborative approach. “They’re the experts on their experience with mental health and they’re also the experts on what helps. What we know from international research is that young people don’t engage in services that they don’t perceive as relevant to young people. They just don’t show up.”

“People think it’s a single problem with a single magic-bullet solution; it’s not.”

– Professor Sir Peter Gluckman, paediatrician, director of Koi Tū



Research indicates that cultural disconnection also contributes to poor mental health, so Jessica’s team will work with iwi and “tap into where young people are – go to their marae, their sports clubs, their churches, and really engage with young people at source”.

Key adult stakeholders, including educators and mental health practitioners, will also be consulted to compare the similarities and differences in perspectives. The ultimate aim is to identify factors that can then be shared with a much broader audience.

“The goal is to present findings that can help determine spending and research development, especially as services transition into this new framework over the next few years under Health New Zealand.”

One of the key issues is expected to be around the provision of quality services that are holistic and culturally receptive.

“Young people want dedicated, responsive treatment with a provider who can be flexible to their needs and properly explain a treatment plan. The providers need to be adaptive to what’s coming up for them too.”

The two-year project is being funded by the Rank Group, owned by Graeme Hart, and Jessica says such support reflects the fact that many New Zealanders are frustrated with the current system and want to see real progress that makes a difference to services and statistics.

“We have this fantastic funding and a group of people who are incredibly invested in understanding what is going on so we can fix the problem at the core.”

Sir Peter says the research will be vital for the future.

“In this urgent crisis, we need to recognise that factors that matter for one child may be different from factors affecting another child in a different ▶

*Dr Hiran Thabrew says children prone to anxiety have taken longer to settle back into school.
Photo: Billy Wong*



“Young people don’t engage in services that they don’t perceive as relevant to young people. They just don’t show up.”

– Dr Jessica Stubbing, research fellow, Koi Tū: The Centre for Informed Futures

◀ context. So, what might impact the emotional status of a recent young Asian migrant might be very different from factors affecting young Māori living in rural New Zealand. We need to know, so we can understand the services needed in each situation.”

BOOSTING MANA

“Help-seeking is really difficult in mental health because often the people who really need the help don’t get it,” says TC, who is the Cure Kids Chair in Youth and Adolescent Mental Health.

Around half of mental health disorders start by the age of 14 and childhood adversity such as poverty accounts for about a third of all adult mental disorders. Reducing poverty, therefore, would have a huge impact on reducing mental health issues in later life.

But there’s something else that’s vital to address – maternal mental health. Shockingly, around 50 percent of maternal suicides are Māori.

“We have to make sure our parents are well supported. Having a baby is tough. If you have mental health issues, precarious housing or you’re already being judged for being pregnant, that’s going to have a big impact on early childhood attachment and behaviours. Parents need supportive environments.”

She says early childcare educators often spot

issues in children and their families first, but what happens next is variable.

“If you ask our kohanga and our early childhood providers, they will tell you the children who are already struggling behaviourally. If we invest in them and their families early, then that would be a far better outcome than letting those behaviours grow and worsen over time.”

She says supporting whānau, particularly in the absence of the village approach from days gone by, would allow parents to better connect with their children, improving the mental well-being of all.

TC is also a strong advocate for community-based services like School Based Health Services (SBHS).

“We’re trying to create pastoral care teams within schools and the ability to be able to respond to young people in a much more holistic way so they don’t just go for their sports injuries – they’re also checking in on their mental health.”

She says the situation for rangatahi Māori (Māori youth) is even more alarming than the overall rates. “It’s quite disturbing that young people have experienced racism from their healthcare providers, so it’s not surprising that they’re not accessing care.”

Given the shortage of Māori psychologists and nurses, she encourages service providers to push

Dr Jessica Stubbing is leading a two-year project into youth mental health, funded by the Rank Group. Photo: Billy Wong

the boundaries and look at solutions that are going to work for communities, “particularly for rangatahi Māori, because Māori have been really poorly supported in child and adolescent mental health and have really inequitable outcomes”.

TC’s Harnessing the Spark of Life project for the Health Research Council found that Māori youth wanted solutions based around whanaungatanga or kinship, which include connecting to whenua, spending time with people who matter and growing through shared experiences.

“While rangatahi do need access to mental health services, they felt that solutions that kept them well, and supported them in their whānau and communities, were much more powerful.”

And she wants to ensure every young person has someone to talk to.

“Our young people and their families need to hear stories of successful responses to mental health and distress – that there are people out there who care, who want to make a difference and will help you.”

POWER OF COMMUNITY

Jemaima Tiatia is “big on community solutions” that are culturally nuanced and enable and empower youth spaces to foster a thriving environment. She supports the Level Up mentoring programme in South Auckland high schools and the Tula’i Pasifika Youth Leadership programme in West Auckland. Both projects are youth centred to grow ‘youth agency’ or leadership around mental health and well-being and both involve a whānau approach.

“The idea is not to assume that we think we know what they need. It is having the ability to step away and allow them to present what is needed and work around that.”

Increasing literacy in mental health is another key objective for Jemaima, who believes there needs to be greater awareness about issues affecting youth so that family and friends can “walk alongside that person or paddle with that person”.

She says age shouldn’t be a factor when it comes to leadership. “Young people’s voices should be around the decision-making table.”

Jemaima’s HRC-funded projects include a study into how cultural identity, family environments and employment affect the mental health of almost 1,000 Pacific youth in South Auckland. It’s being undertaken to improve mental health services.

Another project is centred around the Covid-19 experiences of Samoan women, with the aim of boosting support services for Pasifika women.

“What these studies are essentially trying to do is recommend solutions that resonate with the Pacific population,” says Jemaima, who also researches the impact of climate change on mental health.

MITEY APPROACH

A partnership with mental health charity the Sir John Kirwan Foundation and the University is behind the school learning programme Mitey. Mitey is informed by international best practice and pioneering local research. Developed over two years and targeting Years 1-8, the bicultural programme for all children draws on the ‘Mana Model’ of student well-being, co-developed over the past decade by researchers including Professor Melinda Webber from the Faculty of Education and Social Work. The approach is Māori-centric but is effective across all cultures.

“All of us are born with mana; we’re born with the potential to positively impact and transform the world around us,” says Melinda. “The Mana Model is about how we can, as teachers, parents and students, work in ways that maintain the mana of others in our communities.”

The model identifies five personal, family, ►

MENTAL HEALTH ON CAMPUS

The well-being of the University’s 40,000 students is uppermost in the mind of Liz Hosking-Clement who manages Te Papa Manaaki Campus Care and the Be Well Whai Hauora teams. They provide services ranging from health promotion programmes to individualised support planning and clinical case management. These are separate from the assistance, such as counselling, offered by the University Student Health and Counselling Service (UHCS).

While feeling anxious and stressed is a normal part of life, Liz says the need for support has increased because of the disruption to education and the financial stress caused by the pandemic, as well as other global issues including climate change.

“People are fearful and concerned about the state of the world and what that means when you’re studying.”

The increased challenges were recognised by the government with a \$25 million Tertiary Student Mental Well-being package announced for all universities in the 2020 Budget. It was topped up in 2022 with another \$3.8m for Auckland institutions. Around \$2.3m went to the University of Auckland to provide additional support and services, including more than doubling the number of Campus Care case managers, until 30 June 2024.

One form of support for students is Study Fono, launched in 2022. It offers mentoring, tutoring and pastoral care to first-year students, with a focus on Pacific students, through a dedicated study space in O’Rorke Hall. On-site staff conduct well-being and academic check-ins and senior mentors from most faculties are available to help with course content.

“It’s a holistic wraparound initiative to recognise the beauty of creating a community within our sphere of influence,” says Liz.

The Auckland University Students Association is also involved in student mental health initiatives, through its Be Well Student Well-being team. Well-being ambassadors deliver training to student leaders and clubs on well-being, resilience, bullying, harassment and discrimination. Some of the government funding has gone towards increasing the number of ambassadors.

As a mental health nurse, Liz says being able to collaborate with clinical staff and top researchers within the University creates a great opportunity to innovate and offer best practice support for students. “It’s a great place to work in terms of the care and support we’re providing.”

◀ school and community components that children need in order to thrive inside schools. There's an emphasis on the relevance of the Mana Model for teaching and learning from others, regardless of the child's cultural background.

"Through mental well-being and positive engagement with others, our sense of mana increases," says Melinda. "The impact is transferable in multiple cultural contexts."

Mitey is driven by the expertise of people who have worked in the community, from Sir John Kirwan himself to teacher educators and hired coaches who come from schools to develop customised programmes.

"Schools sit at the heart of our communities," says Melinda. "The Mitey programme honours the hard work of teachers and their commitment to community involvement."

As a social psychologist in education, Melinda says it's important to be aware of different worldviews in addressing youth mental health issues. "We need to do more listening than we do talking when we're learning from people in diverse communities."

She says various agencies involved in mainstream mental health could do more to communicate with each other and could learn more about how to establish and maintain enduring community partnerships. She uses the example of He Paiaka Tōtara, a group of Māori clinical psychologists who share good Māori clinical practice at an annual conference and through an active Facebook group.

"We could place more emphasis and responsibility on our organisations to allow us time to become part of things like that."

Melinda, whose Covid-19 research has focused on Māori, says there have been some positives, such as Māori and Pacific youth seeing their communities respond with resilience in tough

situations by helping each other and sharing resources. But poverty and sickness still have a long-term impact on mental health.

"There will be some intergenerational transfer of stress and trauma onto young people that will remain for decades to come. Covid-19 has had a devastating effect in those ways."

EVIDENCE-BASED SKILLS

In response to the need for well-being interventions at the start of the pandemic, Dr Hiran Thabrew co-led a project at FMHS to quickly develop a mobile phone app called Whitu that teaches evidence-based skills to help those aged 13+ recognise and manage emotions. While there are tens of thousands of apps worldwide that focus on well-being and relaxation, Hiran says the key point of difference with Whitu is that it was designed by a team that included Māori and Pacific researchers, who also contributed to the cultural appeal of the app. Whitu, meaning seven, comprises a seven-day plan – seven ways in seven days.

"It can teach young people skills efficiently in a way that's very cost-effective compared with other means that involve face-to-face therapy, groups or trained clinicians."

What would usually take up to five years to develop was trialled and launched within a matter of months with promising results.

"We were hoping that well-being in the group that used Whitu wouldn't worsen during a pandemic; it would stay the same. But it didn't just do that; it got better."

Hiran says well-being and mental health skills have never been taught effectively in schools and apps like Whitu could upskill students about mental health in the same way they learn about physical health. Given the stigma associated with face-to-face services, Hiran says it's logical to use cost-effective and efficient ways to reach young people who are digital natives. "They're already doing a lot of their schoolwork online, on tablets and other devices. If you want to reach them, you need to work with what they are doing."

Another app co-developed by Hiran and launched in 2022 is Village, which helps young people communicate more easily when they're experiencing low mood, self-harm and suicidal ideation. "The aim with that one is to help start a conversation or to make it easier for young people who are experiencing difficulty to talk with family and friends.

"Village creates a support network of five trusted individuals or 'buddies' to communicate with, and also educates everyone involved about what to say – and do – in practical terms."

In the end, you ultimately want people to be able to talk to each other in real life and not through their devices, but sometimes devices can help you start a conversation to make it comfortable." ■

Professor Melinda Webber says it's important to be aware of different worldviews in addressing youth mental health issues.
Photo: Dean Carruthers

"We need to do more listening than we do talking when we're learning from people in diverse communities." – Professor Melinda Webber, Faculty of Education and Social Work



ON DOGS AND FOOTPRINTS



At any time on any day, someone, somewhere is connecting with a dog or saying goodbye. Their dog, a partner's dog, the family dog, a stray, a pedigree from a registered breeder, a rescue from the streets or puppy mill, or one from someone who had to let the pooch go.

There is nothing exceptional in any of these situations; dogs are part of the everyday for many, in the same way, conceptually, that cats are for cat people.

Our relationship with dogs and the conversations, emotions and connections they spawn are deep seated; whether it is mythology about wolves hanging out with our earliest ancestors for heat from the fire and food scraps, or small dogs bred to warm the laps of wealthy aristocratic women, or hounds bred for chasing game. 'Do you even hunt' might have been an early version of the meme 'do you even lift' attached to gym culture and reforming the body.

Dogs are ubiquitous across popular media. Take film. The giant American review aggregation website Rotten Tomatoes proposes there are at least 67 dog films of note: *Lassie Come Home* (1943), the tale of a boy and his dog that catapulted the rough collie to popularity; Disney's classic *Old Yeller* (1957), a coming-of-age tale anchored by the bond between humans and fur friends; *Scooby-Doo on Zombie Island* (1998), a dog meets creepy things in Louisiana; *I Am Legend* (2007), a German shepherd in a post-viral world; *Marley & Me* (2008), a mix of humour and heartbreak; *A Dog's Purpose* (2017), adapted from a novel dealing with grief, dysfunction, loyalty and reincarnation; and *Dog* (2022), where two army rangers, man and dog, race across the US to make it to a funeral.

Dogs have also been pictured. Francisco Goya's *The Dog* is both enigmatic and sad; there's Rembrandt's *The Night Watch*, where the dog peers from the gloom; Sir Edwin Landseer's *A Jack in Office* where a Jack Russell guards food; Edvard Munch's *Head of a Dog*, perhaps a meditation on grief; through to David Hockney's bright and breezy images of his

dachshunds, William Wegman's at times oddball Weimaraner photographs, the late Queen Elizabeth II's many corgis and the Instagram and Twitter images of United States President Joe Biden's German shepherds.

Then there are dog books, too many to name except for two that have informed this column. The first is the poet Mark Doty's memoir *Dog Years* in which he details bringing home Beau, a large in-need-of-care golden retriever, as a companion for his dying partner. Along with Arden, their black retriever, the dogs are lights in a dark time of his life.

The other is Madeleine Pickup's 1973 book *All About the German Shepherd Dog* in which she writes that an Aga stove is perfect to make semolina for a puppy.

We turned to both when our German shepherd Esther (pictured) was euthanised after she woke one morning and could no longer stand unaided. Our vet had prepared us for the moment for more than a year and, after a text message, was with us in 20 minutes.

As news of Esther's death moved through the neighbourhood, flowers arrived. We took her ashes with us when visiting family the following week in the South Island.

A neighbour asked what we did with the ashes while on holiday and was relieved to learn they travelled with us. She said she would be happy to mind them any time and would put them in the basket in her home which contains the remains of her six dogs, and fragments of tail hair from her many horses.

A colleague recently lost a dog, and we are planting a tree for her.

And yes, we bought an Aga because we ordered a puppy and wanted to make semolina, though sadly the supply chain has meant delays and puppy Margaux is now just shy of a year.

Moreover, the dogs in each of our lives leave indelible footprints.

My best friend wrote, "Esther would say I came with you as far as I could and loved every moment but now you must continue without me but with me in your heart."



Richard Pamatatau is a poet and former journalist who teaches Creative Writing and Intercultural Competence at AUT. He has a Master of Creative Writing with first-class honours from the University of Auckland.

Photo: Louise Bockett

Correction: In the last Ingenio, it was stated Louise Chunn was the first female editor of Craccum. This was incorrect. Winifred McNickle was co-editor in 1927 and others include Betty Belshaw (1943), Nora Bayly (1947) and Felicity Maidment (1960). Full list: craccum.co.nz/about/past-editors/



Budding entrepreneurs immersed in start-up culture in the US

Students Sione Roberts, left, and Paraone Luiten-Apirana in Silicon Valley.

INSPIRING TRIP FOR INNOVATORS

University of Auckland students have enjoyed an all-expenses-paid trip to Silicon Valley, where they met with world-leading innovators and entrepreneurs. The 13 students were part of the Vanguard programme developed by the Business School's Centre for Innovation and Entrepreneurship (CIE), assisted by the

Kea business network, New Zealand Trade & Enterprise and alumni and friends. High-achieving entrepreneurial students were invited to take part in the week-long trip. Sione Roberts, a fourth-year student studying a conjoint Bachelor of Laws and Bachelor of Music degree, came away from the experience with a “new-found belief” in himself.

“From learning how each CEO and business owner found their feet in the New Zealand and the US markets, I realised that creating a company is absolutely possible,” he says.

The trip was enabled by the financial support of entrepreneur and philanthropist Tony Falkenstein.

“Tony’s generosity made a life-changing experience possible for the students and it’s an experience they’ll always remember,” says CIE director Darsel Keane. “They had access to industry makers and shakers that many business leaders would love to spend time with.”

Highlights included being hosted at Allbirds and spending an hour with CEO Tim Brown, hearing from CIE alumnus Bowen Pan about his experiences working at Facebook and digital payment firm Stripe, and meeting with alumnus Manu Sharma for a tour of Google’s research and innovation centre, X – the Moonshot Factory.

Full story: finyurl.com/CIE-silicon-valley

GIFT IN MEMORY OF OLIVE

Sir Michael Jones and Lady Maliena are behind a Pacific scholarship

Sir Michael and Lady Maliena Jones.

In 1989, young All Black Michael Jones was supported in his study at the University of Auckland by the inaugural Lion Nathan Pacific Youth Leadership scholarship. Now, Sir Michael and his wife Lady Maliena

are funding the Olive Malienafau Nelson Pasifika Scholarship for Excellence, to support outstanding Pacific Law students. The new \$10,000 scholarship, which will be awarded annually, was established to honour the late Olive Malienafau Nelson (Maliena’s grandmother) who was the first Samoan and Pacific Law graduate, and one of the first female graduates of the University. She was also the first woman to practise law in Samoa, where she helped draft the country’s constitution.

It is the Auckland Law School’s first endowed Pacific scholarship and it opened for applications in September to Pacific students undertaking Part III or IV of an LLB or LLB (Hons) degree.

Maliena says her grandmother was passionate about Samoa and its people having opportunities to succeed. “We feel she would have very much been in favour of being able to support a Pacific student – one who excels academically, but also demonstrates a strong commitment to their culture and community.”

Sir Michael graduated from the University in 1988 with a Bachelor of Town Planning and a Bachelor of Arts (Geography and Anthropology) and a Master of Arts in Geography (1992). In 1997, the University presented him with a Distinguished Alumni Award to honour his outstanding contribution to society.

Full story: auckland.ac.nz/pacific-law-scholarship



RESEARCHER HONOURED

Ramari Stewart has studied tohorā and related tikanga for 30 years

Whale expert Ramari Stewart has been awarded an honorary doctorate of science. Ramari (Ngāti Awa) is known internationally for nearly three decades of research on tohorā (the southern right whale). She is still working with Professor Rochelle Constantine from the University's Institute of Marine Science on whale research.

The doctorate is on top of Ramari's recent honours. In 2021, a newly discovered whale species (scientific name *Mesoplodon eueu*) was named after her as 'Ramari's beaked whale'. In 2020, she was awarded the Queen's Service Medal for her work in mātauranga Māori, wildlife conservation and research.

In awarding the honorary doctorate, the University said: "Ramari has forged a link between two of the worlds in which knowledge exists.

"She has revitalised a knowledge in danger of being lost."

Full story: auckland.ac.nz/dr-ramari-stewart



Dr Ramari Stewart is a dedicated researcher of tohorā and wildlife conservation.

BETTER TOGETHER

Flagship research centres to work together on societal impact

The University has launched seven new research centres to work on our most pressing challenges.

The University's strategy, *Taumata Teitei*, focuses on four impact areas: sustainability; health and well-being; advancing just, cultured, and engaged communities; and ethical innovation and technology. In response, the University has funded the new centres known as Hikina kia Tutuki, which means 'rising to meet the challenge'. It signals a new approach to research by funding transdisciplinary and interdisciplinary approaches with deep community engagement. The aim? Innovative responses to complex problems.

Deputy Vice-Chancellor (Research) Professor Jim Metson says: "The goal is for these flagship centres to work with communities to develop research questions and use the University's knowledge, expertise and talent to drive sustainable responses."

The University has committed \$8.75m funding over five years to establish the seven Hikina kia Tutuki research centres. They are

the Centre of Pacific and Global Health; Māpihi: Māori and Pacific Housing Research Centre; Ngā ara whetū/Centre for Climate, Biodiversity, and Society; Centre for Co-Created Ageing Research; James Henare Research Centre; Centre for Brain Research; and Te Aka Mātauranga Matepukupuku/the Centre for Cancer Research.

Full story: auckland.ac.nz/flagship-research-centres

MORE NEWS & RESEARCH

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The research centres will engage with communities to try to solve problems that are likely to impact the next generation.





BRAIN GAIN

Professor Chris Shaw is a neurologist at the forefront of gene therapies for neurodegenerative disorders. He's bringing his expertise to the Centre for Brain Research.

Professor Sir Richard Faull is excited. The director of the University of Auckland's Centre for Brain Research (CBR) can't wait to welcome a new "world-leading neuroscientist" to the CBR fold.

"It's a coup for the University and a wonderful appointment," Sir Richard says.

He is talking about the inaugural Hugh Green Foundation Chair in Translational Neuroscience, Professor Chris Shaw, a Kiwi who's been living in London for the past 27 years. Chris is a professor of neurology and neuroscience at the Institute of Psychiatry, Psychology and Neuroscience at King's College. He is the director of its Maurice Wohl Clinical Neuroscience Institute and founder and chief scientific adviser of AviadoBio, a company developing gene therapies to target neurodegenerative disorders such as motor neuron disease. In 2022, AviadoBio was named in the top 15 emerging biotech companies globally in 2022, by journal *Fierce Biotech*.

Chris, who is speaking to *Ingenio* via Zoom from London, runs a clinic for people affected by inherited forms of motor neuron disease (MND).

"Nearly 30 years ago, I met two women with the familial form of MND. It starts with a disability, then takes more from you until you're unable to move your limbs, feed or toilet yourself, talk, and ultimately you are unable to breathe."

The first woman told him she'd spent her life waiting for the disease. Every time she tripped, she wondered if that was the onset. Worse, she feared she'd passed it on to her children.

"It was the year that the first gene for motor neuron disease was discovered and we discovered she had a SOD1 gene mutation. I met a second woman with a different SOD1 mutation three months later. I thought this was probably the worst disease you could possibly get. From that time, I've worked to understand what causes MND and to advance new treatments."

Over the next 20 years, Chris and collaborators undertook what he calls 'gene hunting' and discovered several mutant genes that cause MND, and many others that contribute to risk. "Now we have fantastic insights into the disease mechanisms. That provides targets for drug discovery."

This gene hunting is beginning to bear fruit. Some of Chris's MND patients are enrolled in clinical trials of anti-sense oligonucleotide (ASO) therapies that target three different genes. One of these ASO therapies, targeting SOD1, appears to be effective.

"It absolutely works. If you get in early, you can stop the disease in its tracks."

Treatment is by lumbar puncture injection every month and is likely to be expensive.

"My team is working on trying to get the body to make its own anti-sense to target the same genes. It can be done, it's just not easy."

For that, tiny DNA fragments are placed into the cerebral spinal fluid through a lumbar puncture, to silence the gene mutation. The neuroscientists are designing a viral package to continuously make 'silencing RNA' from a single injection. Delivering this into the brain and spinal cord is complex – the brain is good at protecting itself from virus particles getting through its protective pia membrane, which Chris describes as "like Glad Wrap around the brain, preventing viral entry".

Chris has almost as many letters after his name as papers published (around 300), but this superbrain is down to earth. The Dunedin-born scientist has wanted to return to New Zealand for some time.

"I'm a British citizen, but I still only have a New Zealand passport. I love New Zealand. And I'm a huge admirer of Sir Richard. What they've created at CBR is impressive."

Dr Emma Scotter from CBR also worked in Chris's lab in London.

As well as running the teaching programme at King's and the clinical service, Chris has raised around £50 million for research infrastructure. He helped design and build the Wohl Institute, one of the largest neuroscience research facilities in Europe. His overseas research will continue, as he builds up his role at the University over time. Maintaining his international connections will be crucial.

One of his first stops, when he arrived in October, was to see family, including his 92-year-old mother in Wellington whom he hasn't seen for three years.

"Mum is formidable. She was a schoolteacher who raised three boys in Christchurch after she and my dad split. He was a biochemist and we'd gone to live in the US when I was six."

He's also looking forward to being a "cheerleader for neuroscience", by giving talks, visiting schools and also trying to attract Māori and Pacific students.

He has been busy preparing for a month in New Zealand and an inaugural lecture, as well as appointing neuroscientists to AviadoBio to continue with his research. "I'm living as though I'm in a Mario Kart. Dreaming of coming home is something solid to hold onto." ■

—
Professor Chris Shaw is a neuroscientist returning to New Zealand for a position funded by the Hugh Green Foundation.

"We have fantastic insights into the disease mechanisms, and that provides targets for drug discovery."

— Professor Chris Shaw

Vision Bus gets into gear

The Vision Bus Aotearoa was launched in June and is already making a difference, writes **Jodi Yeats**.

In its first ten weeks, the Vision Bus Aotearoa had visited seven primary schools as well as the Māngere Refugee Centre, testing people and fitting glasses for children who otherwise wouldn't have had them.

Run through the University's School of Optometry and Vision Science (SOVS) and funded entirely by philanthropy, the bus is driven by Veeran Morar, a professional teaching fellow in Optometry and Vision Science. He says he is motivated by seeing the look on children's faces when they put on their first pair of glasses and see the world anew. It reminds him of his own experience.

Veeran loved playing hockey as a child but, at around 12, realised he couldn't see the ball at the end of the field. "Mum took me to the optometrist. I put on my first pair of glasses and I was blown away. I could see the leaves on the trees. I knew at the time it was going to change my life and it did."

Veeran went on to play hockey for New Zealand.

Vision Bus Aotearoa was officially launched at the Faculty of Medical and Health Sciences in June. Professor Steven Dakin, former head of the SOVS, had been working on the project for five years.

"When we look at schoolchildren, we know that one in ten needs glasses but doesn't have them," he says. "If they don't have good visual correction, they can't see whiteboards, which impacts them educationally. More worryingly, we see potentially blinding conditions, such as keratoconus, regularly going undiagnosed in children, with Māori and Pacific disproportionately affected."

Barriers include cost, distance from services and knowledge of optometry services. Of those referred to the Vision Bus, two-thirds are assessed as needing glasses.

Special education needs coordinator at Fairburn School, Otāhuhu, Alta Van Zyl, says around 30 pupils who have received glasses certainly would not have otherwise.

"We expect to see a big impact in about a year. Children will be able to access texts and enjoy reading."

She says the children have been very positive about the Vision Bus. "One reason is they are allowed to choose their frames. It has had a positive impact on our school and our



community. The kids are excited and it's building awareness about optometry."

Prior to driving the Vision Bus, Veeran was working in the Australian Outback as a flying optometrist. "I fell in love with it – doing something remote where you provide a service people wouldn't otherwise have access to."

In another bid for equity, a team from the SOVS delivered a report to Parliament on 27 July on the state of eye health services in Aotearoa New Zealand. The researchers found the country is doing well when it comes to quality and training, but poorly for equitable access.

"We are calling for the government to develop an eye health strategy that will enable funding to improve access," says one of the authors, Dr Renata Watene.

The Vision Bus is funded by Rae and Peter Fehl, a former University staff member, who heard Steven talking about his dream for the unit on RNZ. The \$1.8m donation by the Fehl Family Trust funds the vehicle and its service for the first five years.

Steven says there was also a need to offer children glasses and contact lenses, which is where further donors have 'closed the loop'. These include Helen Blake and daughter Barbara, through the George Cox Community Spectacle Fund (George was Helen's father) and Essilor, an international optics company, who are subsidising the cost of spectacles.

The hope is that the service model being developed around the bus – delivering eye-health services in partnership with local communities – will be widely adopted and government funded in the future.

Veeran Morar from the School of Optometry and Vision Science drives the Vision Bus and does the eye testing.

Photo: Billy Wong

"We expect to see a big impact in about a year."

– Alta Van Zyl, Fairburn School, Otāhuhu

Genomic game- changer for babies



Researchers from the University of Auckland's Liggins Institute are about to harness the technology of rapid genome sequencing in the hope of improving the well-being of critically ill newborn babies. By **Donna Chisholm**

It took scientists 13 years and \$US300 million to sequence the human genome. Twenty years on, the process, which now takes mere hours and costs just \$1,000, is about to be used here in research benefiting the lives of dozens of babies born with rare and difficult-to-diagnose genetic diseases.

Liggins Institute deputy director Professor Justin O'Sullivan is heading efforts to launch rapid genomic sequencing for newborns in New Zealand, in a research project that will begin in 2023 and ultimately lead to the technique becoming common clinical practice. It's already increasingly used in leading hospitals in Australia, the United States, Germany and Great Britain.

The technique was used on a baby born here in 2021, but the DNA samples were sequenced in Australia. Although in that case the child could not be saved, Justin and Liggins director Professor Frank Bloomfield, who published a case report on the child's care, say the diagnosis

provided certainty in a highly stressful situation, meaning doctors could avoid unnecessary medical procedures and the parents could spend as much time with their daughter as possible.

Donors backing the work include the Dines Family Charitable Trust, which has committed \$1 million in addition to its support for other research across the University, at the Liggins Institute, Auckland Bioengineering Institute and Faculty of Engineering.

"We already know we can do it," says Justin. "The issue is simply one of demonstrating that rapid genomic sequencing is going to work and that it has an economic and social impact."

It's estimated that about 6 percent of the babies in intensive care at any one time – roughly 12 children – will have one of the 7,000 genetic conditions doctors currently know about. Some American estimates range up to 15 percent, Justin says. The children are often desperately ill but the cause of their illness can be baffling. Sometimes, the disorder will prevent the baby metabolising nutrients such as protein and fat, causing them to steadily deteriorate after birth.

In one case recently diagnosed in the United States, a critically ill baby was discovered to have infantile encephalopathy linked to a genetic form of epilepsy and the disease was readily treated with biotin and thiamine. The child stopped seizing within days and, now seven months old, hasn't had a seizure since.

"The quicker you can treat them, the less damage," Justin says.

The Liggins Institute has ordered two state-of-the-art PromethION machines to sequence

Professor Sue Stott, left, and Dr Sian Williams are working to bring forward diagnoses of cerebral palsy in babies.

Photo: Elise Manahan



about 500 genomes from around 170 babies and their parents for the research project, which will cost \$6-7 million over the next five years. Justin is in the process of applying for ethics committee approval for the study.

Given the extent of the information the tests will provide on risk for other diseases, ethical considerations and the support of genetic counselling will be vital. The sequencing could reveal genetic variants linked to a number of cancers, as well as the heightened risk of a raft of conditions, some of which are untreatable. Parents will be asked if they want to know about any incidental findings and Justin says the study's collaborators will ensure the proper handling and governance of the samples, in a way that recognises and provides for tikanga Māori.

The project is one of two arms of new University of Auckland research to improve outcomes for babies. The other, led by Dr Sian Williams of the Liggins Institute and Professor Sue Stott of the Faculty of Medical and Health Sciences, aims to bring forward diagnoses of cerebral palsy (CP), thanks to a \$200,000 funding injection from the Cerebral Palsy Alliance Research Foundation.

About one baby in 500 is born with CP here – about 120 a year – but diagnoses aren't usually made until children are, on average, 19 months old, because the signs often only become apparent if the child is unable to perform the expected complex motor functions.

Prematurity is associated with about half of cerebral palsy cases, but damage to the developing brain can also be caused or accelerated in the womb, during birth, or up until two years of age.

Sian says three reliable diagnostic tools – MRI, a general movements assessment, and the Hammersmith infant neurological examination – can accurately diagnose CP or predict babies at increased risk, from three months of age. Studies are increasingly showing that early intervention with physiotherapy and occupational therapy during this time of peak neuroplasticity can reduce long-term disability.

Sian and Sue led a 2021 study that showed only 21 percent of the 57 families who participated received a diagnosis before their child was six months old, despite 60 percent of them expressing concerns earlier about the baby's movement. The CP Alliance money will support the pilot of an early diagnosis hub in the Wellington region which, if successful, could be launched nationally.

The introduction of rapid genomic sequencing comes 50 years after the pioneering work of Professor Sir Graham 'Mont' Liggins, after whom the Liggins Institute is named. In a paper published in 1972, Sir Graham showed how antenatal steroid injections could mature



Professor Justin O'Sullivan says the sooner risks are known, the sooner treatments can occur.
Photo: Elise Manahan

“I think we put DNA on this pedestal – ‘Oh we have to be very careful about our DNA’, and yet we leave it everywhere, absolutely everywhere. It’s on every coffee cup.”

– Professor Justin O'Sullivan, deputy director, Liggins Institute

the lungs of babies at risk of being born too early. The technique has since been introduced globally, saving tens of thousands of lives.

Justin acknowledges the latest technology might sound scary to some, but it is not.

“This is not new: genetic diagnosis is already here. We're just trying to introduce a rapid whole genome-based approach inside the country that's accessible. Yes, it is scary to some people, but I think we put DNA on this pedestal – ‘Oh we have to be very careful about our DNA’ – and yet, we leave it everywhere, absolutely everywhere. It's on every coffee cup.”

Rapid sequencing is just the beginning, he says.

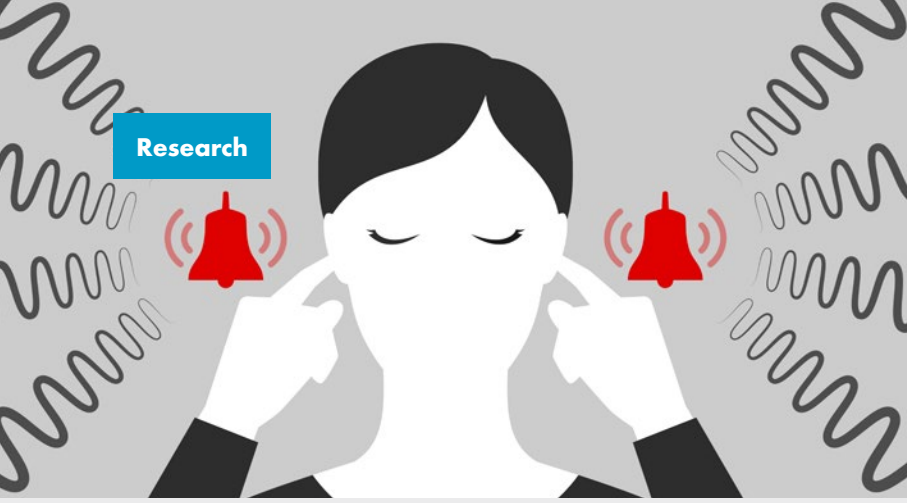
“If we get this running properly, the impacts are massive. Usually, the sooner you know you are at risk, the more likely it is that treatments will reduce or delay the effects, when the treatments exist.

“Over time, rapid sequencing will become more acceptable as a part of the healthcare system.”

So, what would Mont make of this latest advance? Justin never met Mont, who died in 2010, but hopes he'd be proud.

“I'd like to think he'd be really supportive. The beautiful work he did is the foundation of the Institute, which turns 21 this year. This is just a new technology that's giving us the ability to help in a different way” ■

Research



Tinnitus is a phantom noise and its causes are complex. Around five percent of sufferers experience it to a distressing degree.

Breakthrough for tinnitus sufferers

University audiologists are excited by a new treatment for tinnitus

After 20 years searching for a cure for tinnitus, researchers at the University say they are encouraged by results from a clinical trial of a mobile-phone-based therapy.

The study randomised 61 patients to one of two treatments, the prototype of the new 'digital polytherapeutic' or a popular self-help app producing white noise.

On average, the group with the prototype digital polytherapeutic (31 people) showed clinically significant improvements at 12 weeks, while the other 30 did not. The results have been published in *Frontiers in Neurology*.

"This is more significant than some of our earlier work and is likely to have a direct impact on future treatment of tinnitus," says associate professor in audiology Grant Searchfield.

Key to the new treatment is an initial assessment by an audiologist who develops the personalised treatment plan, combining a range of digital tools, based on the individual's experience of tinnitus.

"Earlier trials have found white noise, goal-based counselling, goal-oriented games and other technology-based therapies are effective for some people some of the time," says Grant.

"This is quicker and more effective, taking 12 weeks rather than 12 months for more individuals to gain some control. What this therapy does is rewire the brain in a way that de-emphasises the sound of the tinnitus to a background noise that has no meaning or relevance to the listener."

The next step will be to refine the prototype and proceed to larger local and international trials with a view to FDA approval. The researchers hope the app will be clinically available in six months. People can register for a trial at truesilencetherapeutics.com.

ENVIRONMENTAL RESEARCH RECEIVES BOOST

Sustainability is front of mind in big interdisciplinary projects

Associate Professor Julia Fehrer says plastic waste can create opportunity.

Researchers focused on plastic and geothermal energy are among those to receive funding boosts from the government's 2022 Endeavour Fund.

An \$11.7 million project to increase the reuse of plastic by businesses was the single largest allocation to researchers in government funding announced in September. The five-year plastics project will be led out of the Faculty of Engineering and the Auckland Business School, with numerous partners including RMIT University in Melbourne and crown research institutes Scion and GNS Science.

Associate Professor Johan Verbeek of the Department of Mechanical Engineering says it's important to influence businesses to become more circular in their plastics use, and to deploy new techniques to make plastics more recyclable. New Zealand sends about 380,000 tonnes of plastics to landfills every year.

Shaping a circular market of remaking, reusing, recycling and upcycling products from plastic waste presents an opportunity for the country to create new, high-value plastic materials and products, according to Johan and colleagues Professor Simon Bickerton of the Faculty of Engineering and Associate Professor Julia Fehrer of the Business School.

All up, \$24m was allocated for two five-year research projects relating to plastics and geothermal energy and \$8m for smaller projects. Full story: auckland.ac.nz/2022-endeavour-fund



LONG HAUL IN EQUITY RESEARCH

Research shows it may be a century before universities reflect true diversity

Dr Sereana Naepi is a lecturer in social sciences at the University, who is a Rutherford Discovery Fellow. Her research looks at the university system and whether it serves all those who come to study, as well as what a New Zealand university should look like in the 21st century.

Sereana's work builds on her training as an educational sociologist, examining the nature, purpose and role of higher education with a strong lens on what equity actually entails.

A 2019 paper "Why isn't my professor Pasifika?" offered an uncomfortable snapshot of the diversity of the country's eight universities. The takeaway: despite national and university policies to serve Pacific people better, there had been no change in the number of Pacific academics employed between 2012 and 2017, at 1.7 percent of the total workforce.

Sereana stakes no claim to be a quantitative researcher. She is a sociologist not a statistician. However, the data she collected has proved to be a "blunt but recognisable tool" for universities.



"We have fewer than five professors who identify as Pacific. Something has stopped the progression of Pacific people in academia."

She believes the challenge for universities in Aotearoa New Zealand is not to create another Oxford but how to create a university that looks like "here". "We're known internationally for our Indigenous research. Should we not embrace that and become leaders in that field, does that not make sense?"

She acknowledges institutions are creating pathways to encourage more Pacific and Māori into higher education but "at the present rate it could take 130 years to see Pacific equity in the academy."

"I'm going to keep on thinking about the different questions we need to ask. Some may cause a little bit of trouble, but when we cause a little bit of trouble, that means things change."

Full story: auckland.ac.nz/education-equity

Dr Sereana Naepi is investigating equity in higher education.
Photo: Elise Manahan

MORE RESEARCH

Keep up to date with University research and news at auckland.ac.nz/all-UOA-news-stories

Digital people helping healthcare

Innovative platforms are being developed to improve health

The Auckland Bioengineering Institute (ABI) has received more than \$4m to investigate how digital people can be used to monitor people's health and provide support in managing health conditions.

The money comes from the Ministry of Business Innovation & Employment's Catalyst Strategic Investment Fund, in partnership with Soul Machines. It was set up in 2021 for internationally connected research projects to explore the potential of AI in healthcare. Soul Machines is a New Zealand AI company that pioneered the creation of digital people to interact with humans in real time and a lifelike manner. The ABI has access to Soul Machines' digital people for the duration of its projects.

Professor Merryn Tawhai, ABI deputy director, will lead an international consortium to explore how digital people can support the management of Type 2 diabetes and cardiovascular disease.



"While we know intensive interventions with clinical and personal coaching are effective, their cost puts them out of the reach of most people."

Her team will create interconnected digital tools to coach patients to self-manage their condition.

The other international project, led by Professor Mark Billingham, is 'Tōku Hoa: a Personalised Agent for Mental Health'. This will explore how digital people could provide long-term monitoring of mental well-being and will involve the development of software for smartphones, watches and other wearable sensors to monitor emotional well-being through physiological cues such as heart rate, speech and activity.

Full story: auckland.ac.nz/digital-people-health

Soul Machines' AI digital people can appear on computers and smartphones, interacting in a lifelike fashion.

Professor Robert Greenberg says people in Eastern Europe have long memories. Photo: Billy Wong

WAR IN UKRAINE: UNCLEAR ENDGAME

The war in Ukraine is evolving as a dangerous trigger point for widespread global conflict. Anthony Doesburg talks to three University of Auckland experts who analyse the issues.

“The modern Ukrainian people are based on a common language and a common sense of nationhood.”

– Professor Robert Greenberg, Slavic specialist, Dean of Arts

If Covid-19 thrust epidemiologists into the media spotlight, the Ukraine conflict is doing the same for academic specialists in Eastern Europe and international relations.

A number of University of Auckland staff have taken to print, news websites and webinars with analyses of the war since Russian forces entered Ukraine on 24 February 2022.

Among them is Dean of Arts Robert Greenberg, a linguistics professor specialising in Slavic languages and a frequent visitor to Russia and Ukraine. Soon after the invasion, he wrote on *Newsroom* that the region’s past suggested there would be no winners from the conflict. Eight months on, that’s still the case: Russian forces appeared to have the upper hand initially but more recently the Ukrainians recaptured a large portion of Kharkiv province in the northeast.

If it is hard to believe in modern times that one European state would invade another, Robert points out that much of Eastern Europe is plagued by historical territorial tensions.

“Some of these areas have been contested by bigger powers for years, for centuries. A good example is Poland, which was partitioned three times at the end of the 18th century, and so was what is now Ukraine. Poland had been a bona fide state in medieval times and it totally disappeared off the map in the 19th century.”

Proving that history repeats itself, expansionist Russia had consumed parts of Poland and

installed Nicholas I as tsar. The country’s fate was a key theme of Polish composer Frédéric Chopin, Robert says.

Contemporary Ukraine, led by President Volodymyr Zelensky, has existed as an independent country only since 1991 and the collapse of the Soviet Union.

“It’s not a longstanding country such as France or England, therefore I think it is accurate to say that this conflict is a continuation of the contestation of that territory,” says Robert.

“In that part of the world, history is front and centre in people’s minds. We may think of World War II as a long time ago, but people in Eastern Europe have long memories. They don’t forget what happened 50, 100 or 200 years ago. They don’t quite move on.

“These are Slavic peoples and, for them, language is a big marker of identity. The modern Ukrainian people are based on a common language and a common sense of nationhood. However, in the Donetsk and Luhansk parts of eastern Ukraine, the main language of everyday life has been Russian.

“These are Russian-speaking Ukrainians and that adds to the contestedness. They don’t quite fit even the Slavic definition of being clearly of that Ukrainian nation because they’re Russian-speaking.”

That notwithstanding, according to international norms, the land within Ukraine’s 1991 borders is the country’s indisputable sovereign territory.

“But Russia started violating that from 2014 on,” Robert says. “Those of us who abhor violence and war are sad to see the loss of life and you begin to ask what is the endgame.

“I don’t think surrender is likely because Ukraine’s heels are dug in too deeply. What is needed is some kind of honest broker with the clout and ability to bring the two sides together to talk about how to get out of this.”

Part-time Faculty of Arts lecturer Associate Professor Gordon Morrell also works for Nipissing University, Canada, and is a specialist in Russian history. He says 50 years from now, we’ll have a clearer understanding of the conflict begun by Russian President Vladimir Putin.

“My historian reflexes recognise that although this is a new situation, it’s not entirely so and some of these tensions and grievances go very deep and long. In a way, the conflict is telling us that imagining the world is going to stay on a path of progress as defined by the West is probably just false confidence.

“From Putin’s generation’s point of view, the weakness of former president Boris Yeltsin’s regime early in the post-Soviet era was a betrayal of Russia. It’s not hard to make a historical case that the Russians see eastern Ukraine at least as part of the Russian empire – they’re not embarrassed about having an empire.”



Dr Anna Hood says international criminal law has only a limited deterrent effect.

Photo: Billy Wong

Gordon thinks Putin wants to leave a legacy that says, “I helped rebuild Russian power and rescue people who were on the wrong side of the Russian border.”

What will come out in the wash of history is the conversations that took place between Ukraine and Russia in the two years before the war, and whether Russia indicated it sought a guarantee of Ukrainian neutrality and recognition of Russia’s 2014 gains, as well as a small territorial adjustment in the east.

“If that’s part of what was on the table, and Ukraine said no, those are elements in understanding the decision to go to war. But we’re not going to know that for some time. Eventually, 60 years from now, historians will see what was at work here.”

Although the Canadian national concedes the role of historians in the here and now is not obvious, studying archives of the powerful talking to one another has shown him the advice they received that took history into account tended to be the best advice in decision-making.

“The 50-year view turns out to be true more often than we like to think. But that doesn’t help US President Joe Biden or other leaders make decisions today. Historians aren’t very useful in that sense, but that’s not their job.”

Disquietingly, he thinks Putin looks on eastern Ukraine similarly to how China sees Taiwan, as a lost or renegade province that needs to be part of the whole. “It’s not identical, but it’s similar in some ways.

“Not all historians share my perspective, but that’s the nature of the beast, and never would I want the hot seat of making decisions in these sorts of situations. What’s happening in Ukraine is a tragedy, there’s no other way around it.”

If historians have the luxury of time in analysing conflict’s causes and effects, those trying to broker a just peace are up against the unfortunate reality that truth is war’s first casualty. But already, says Dr Anna Hood,

senior lecturer in the Faculty of Law and an international law specialist, attempts are being made to hold parties to the conflict to account.

Typically, investigations and prosecutions take years, if not decades, says Anna who, with Gordon, took part in a Europe Institute online discussion about the war earlier this year. She says Ukraine has begun taking war-crime prosecutions in its domestic courts. According to the BBC, a 21-year-old Russian tank commander has been given a life sentence for shooting a Ukrainian civilian.

The threat of being tried can seem an ineffective disincentive to waging war, but that’s not the whole aim, Anna says.

“Prosecuting war crimes can be important for holding people to account for their actions and to provide some level of redress for victims and survivors. However, if we are concerned about how we end wars and prevent future wars, it’s important to have regard for other matters, as international criminal law has only a limited deterrent effect.

“In particular, there is a lot of thinking to be done about the inequities and power imbalances that exist within the international system. If we were able to rectify some of them, it would go a long way to enhancing how the international system functions.” ■

The *New Zealand Journal of Research on Europe* is calling for papers for its special issue *Contextualising the Russian Invasion of Ukraine*. Deadline for submissions is 15 February 2023.

See tinyurl.com/NZJRE-papers-Ukraine

“Imagining the world is going to stay on a path of progress as defined by the West is probably just false confidence.”

– Associate Professor Gordon Morrell, Russian history specialist



Associate Professor Gordon Morrell believes Vladimir Putin looks on eastern Ukraine similarly to how China sees Taiwan.

Photo: Billy Wong



TOP JUDGE'S PROMISE: FORGET NO ONE

Justice Dame Susan Glazebrook speaks out about the plight of female judges in Afghanistan.

“These judges have been robbed not only of their identity as judges, but also as women.”

Justice Dame Susan Glazebrook (DNZM) is a Supreme Court judge and distinguished alumna. She is president of the International Association of Women Judges.

In August 2021, the Taliban reached Kabul. This put the 270 female judges of Afghanistan and their families in grave danger. They were at risk because the idea of women judging men does not fit with the Taliban view of the world. They were also at risk because they were seen as being associated with the previous regime and with Western values.

The Taliban emptied the prisons, putting the judges in grave danger of retribution from the criminals and terrorists they had sentenced. The female Afghan judges had no choice but to go into hiding with their families and to try to leave Afghanistan as soon as they could.

A small committee of volunteers from the International Association of Women Judges (IAWJ) promised to help. We, naively as it turns out, thought the danger these judges (and other female activists) faced would be obvious and they would be one of the first groups to be included in the evacuation flights arranged before the withdrawal of foreign troops. This turned out not to be the case. Only a small number of the judges were evacuated in this period, to countries such as Poland, Romania, Spain and the United Kingdom. And for most it was not an easy journey to the airport. The judges, often with young children, had to struggle their way through a crush of people in the searing heat, through armed checkpoints and finally wade through what had become a sewer. It took up to 36 hours just to get into the airport. Our committee

members were with them (virtually) throughout, encouraging and guiding them through our links with the troops and others inside the airport and, on one memorable occasion, with Google Maps.

After the withdrawal of foreign troops, there was a hiatus. Our committee was doing all it could to raise awareness of the plight of our sister judges in the hope the international community would respond. However, it was mostly left to non-governmental organisations, like the IAWJ, to take on the responsibility for further evacuations. It was a major relief to our committee when a good number of our judges were included on charter flights in October 2021 to interim destinations including Greece, Albania and the United Arab Emirates. We are so grateful to our partners, including the International Bar Association and the Aleph Foundation, for organising these flights. We are also grateful to our interpreters, those who set up and maintain our database and all the dedicated pro bono lawyers who have assisted our judges with immigration advice. And to the funders, including generous donations from New Zealand.

We are particularly grateful to the countries where our judges have been accepted for final resettlement, including Australia, the UK, Germany, Spain, Ireland, Canada and the US. New Zealand has also welcomed six judges and their families. All these countries are lucky to have such courageous, dignified and talented women, who will make a real contribution to their new country. But it will not be easy. They need to adjust to a new language and a new culture, as well as retrain. And, all the while, they're grieving for their old lives and desperately worried about family members and friends they had to leave behind. They are also very worried about their colleagues still in Afghanistan. Some 70 female judges remain trapped there. These judges have been robbed not only of their identity as judges but also as women. The Taliban, far from being a new and more modern Taliban, have failed to reopen secondary schools for girls, have imposed stringent travel restrictions on women and require them to cover themselves completely in public (but preferably to stay home). And the danger is increasing. The Taliban is more organised, the security situation is deteriorating and there is a major economic crisis, including food shortages. Evacuations are more challenging. Charter flights seem no longer possible and funding and visas are harder to secure even to interim destinations.

We are determined, however, to try to fulfil the promise we made last August to forget no one. Our training and experience did not prepare our committee for a major humanitarian effort of this kind, but to give up now would be impossible as a matter of integrity and as IAWJ members dedicated to gender equality, human rights and the rule of law. The real heroines, however, are the Afghan women judges. I pay tribute to them.

COMMITTED TO A CAUSE

Cameroon-born student **Bernard Sama** talks to Judy Wilford about how to treat people claiming refugee status. He knows: he has walked a mile in their shoes.



“**Y**ou are in a safe place. These are the words a person needs to hear when entering New Zealand to claim asylum,” says University of Auckland PhD student Bernard Sama.

Bernard speaks from personal experience. The chair of the board of the Asylum Seekers Support Trust (ASST) took that step himself more than ten years ago. He succeeded in gaining refugee status under the terms of the United Nations Convention on Refugees, and is now a citizen of New Zealand conducting research that is already changing lives.

“Every person who steps out of a plane as a refugee status claimant is terrified,” he says. “Most are fleeing traumatic events in their countries of origin and are overwhelmed with the fear of being sent back to face further persecution, even the risk of torture or death.”

They need to be referred immediately to someone who understands the UN Convention; instead they are often treated as criminals.

New Zealand is a signatory to the UN Convention, which means the people who claim asylum have a legal right to be admitted, to have their claims examined and be granted permanent residence if those claims are found to be valid. This applies even if they have no valid passport, recognising that those who flee for their lives will often have to do so at short notice and without a chance to gather legal documents.

What will give them peace of mind and a base for a healthy life, says Bernard, is that vital assurance of safety right from the start. There is also an urgent need to improve and streamline refugee status determination processes, which sometimes take years and have a profound effect on the claimants’ lives.

When Bernard arrived in New Zealand, he already had a law degree from his country of birth, Cameroon. He then studied mental health and psychology, completing a Master of Health Science with first-class honours at AUT before enrolling at the University of Auckland for his PhD with the help of a University of

Auckland doctoral scholarship. He is now close to completing his thesis, which explores the psychological impact of laws and examines ways to inform and improve New Zealand’s procedures for determining refugee and protection status.

Bernard says his PhD study was prompted by a commitment to change.

Already it has contributed to one much-needed alteration in policy: the recent decision by the New Zealand government not to detain asylum seekers in criminal justice facilities. This was the thrust of a successful campaign by Amnesty International, which showed the devastating psychological effects of imprisoning people without charge and for unspecified periods, sharing the same space and conditions as remand prisoners.

Bernard’s research contributed to the campaign, and he was a member of the delegation that took the report to parliament. The government then commissioned a report by Victoria Casey KC on *The Detention of Asylum Claimants*. Her report supported the Amnesty findings, and the decision was made.

Bernard is researching a range of challenges asylum seekers face. His research comprised part of the data used in a recent *Safe Start Fair Future* report by the Centre for Asia Pacific Refugee Studies (CAPRS) at the University of Auckland and the ASST.

In May 2022, the report was presented in parliament. It advocates for asylum seekers’ eligibility and government funding for essential services, including accommodation, welfare, mental health services, and the right to work. It also argues that once the status of Convention refugees is recognised, they should be included in the New Zealand Refugee Resettlement Strategy and enjoy the same conditions as quota refugees.

While quota refugees enter with immediate rights to permanent residence, Convention refugees have to wait, often for two years or more, before their residence status is confirmed.

Says Bernard: “To align those two groups is a logical step towards justice.”

Bernard Sama is researching a range of challenges that asylum seekers face.
Photo: Billy Wong

“Every person who steps out of a plane as a refugee status claimant is terrified.”

– Bernard Sama, PhD student, Centre for Asia Pacific Refugee Studies

IS BEING PREDATOR FREE BY 2050 REALISTIC?

Three academic minds from the University explore the question.

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

Rattus rattus, aka the ship rat, is widespread in Aotearoa New Zealand.

Photo: James Russell

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



SOCIAL CHALLENGE, NOT BIOLOGICAL

Professor James Russell

New Zealand started on a path to becoming predator free 60 years ago, when the first rat eradication was completed on a tiny island in the Hauraki Gulf.

Since then, introduced mammalian predators have been removed from half the islands they inhabit around New Zealand.

Our global study, published in August in *Scientific Reports*, shows New Zealand leads the world in island eradications and although the number of island eradications is slowing down, the area being cleared of predators continues to increase. This reflects a shift in focus from small and remote uninhabited islands to larger inhabited islands.

New Zealand leads the world in island eradications because of sustained investment over decades in the people, knowledge and technology required to achieve increasing scales of predator control. The first breakthroughs made in the 1980s fine-tuned the methodology for ground-based eradication of predators. In the 1990s, the use of helicopters enabled aerial eradications over larger uninhabited islands. In the 2000s, the use of experimental invasions demonstrated that reinvasions could be successfully intercepted.

The challenge today when focusing on larger inhabited islands, such as Aotea (Great Barrier Island), Waiheke and Rakiura (Stewart Island), is successfully collaborating with inhabitants to find a pathway of shared values to achieving predator-free status. This is inherently a social and not a biological challenge, and requires a new toolbox to progress island eradications.

In a national study published in September in the *Journal of Applied Ecology*, we show different scenarios for predator control coverage of mainland New Zealand. Under all scenarios, a breakthrough in technology or new use of existing technology is required to obtain complete national coverage. Ongoing investment in people, knowledge and technology for predator control is therefore paramount.

Without such investment, we will not be able to fully realise the benefits predator control can bring to restoring birds and reptiles to their original ranges across the entirety of Aotearoa, and not just its far-flung islands. Being predator free by 2050 is realistic, but requires everyone to contribute towards this shared vision.

Professor James Russell is a conservation biologist in the School of Biological Sciences and Department of Statistics.



IMPORTANCE OF MĀTAURANGA

Professor Jacqueline Beggs

Large-scale community rat trapping, toxin packaged into toilet rolls, gene drives that could target predators. From backyard solutions to high-tech labs, there has been a massive surge in activity targeting rats, stoats and possums.

We don't yet know how we can achieve eradication on the mainland, but we do know that it will require substantive ongoing investment. The question for me is not can we achieve Predator Free 2050, but should we?

The mauri, that is the natural life force, of Aotearoa New Zealand is diminished. Overfishing, plastics and climate change threaten our marine systems, land use change means 90 percent of wetlands have been lost, kauri and other native plants are threatened by pathogens.

Eradicating mammalian predators will not solve these problems. Our unique biodiversity is spiralling downward with more than 7,500 species of plants and animals at risk. Not all these species are threatened by rats, stoats and possums, so even if we did achieve eradication, it would not deliver the stated goal of "native species safe from extinction and thriving alongside us".

Given limited resources, where should we focus our effort to make the greatest gains? We need to evaluate the opportunity costs to ensure pursuing eradication of a few mammalian predators stacks up against gains that could be made in other areas.

We are teetering on the edge of a catastrophic loss of biodiversity, escalating dangerous environmental conditions, and increasingly scary global, political and social responses that exacerbate human suffering and inequalities.

These issues interact and while there are many potential solutions, we continue to fail to implement the transformational changes required to achieve even modest sustainability goals. Holistic and equitable approaches are vital.

Traditionally, Māori values of kaitiakitanga (guardianship) and manaakitanga (care and respect) place caring for the land and people as central, interconnected ways of life that draw on mātauranga (Indigenous knowledge). Recognising the important contribution of mātauranga and adopting a more holistic approach could improve environmental outcomes and help drive the transformational change we need.

And, by the way, packaging toxin in toilet rolls is a terrible idea when young kākā love testing out novel objects.

He waka eke noa. We are all in this together. **Professor Jacqueline Beggs from the School of Biological Sciences is an expert in conservation and endangered species.**



EVERYDAY PEOPLE PLAYING A PART

Professor Rachel Fewster

The question is futuristic. So I'm taking a futuristic approach to answer it. If a time traveller were to tell me that Predator Free 2050 (PF2050) was indeed achieved, I'd be thrilled, delighted, exhilarated ... and surprised. The conversation between us might go something like this.

Me: What was the breakthrough?

Time traveller (TT): It was the xyloblobbacoty technology.

Me: Wow, ingenious! Wasn't around in my day.

TT: Plus huge social buy-in and support.

Me: Now that I expected.

TT: I don't get it. Weren't you expecting PF2050 to be successful?

Me: You know, I hadn't thought about it much.

TT: Then why did you put in all this effort towards it?

Me: Well, 2050 was never quite the point for me.

TT: Didn't you rate the PF2050 movement?

Me: On the contrary, I've been a huge fan. It was the best announcement I can remember.

TT: Explain, please?

Me: It is the vision that's been the powerful thing. The announcement inspired action and investment and lots of it. Overnight it became normal to want to be predator free, and normal to play a part. Trapping projects sprang up all over the place, run by regular, everyday people in their own backyards. Pretty much everyone was on board.

TT: Sounds like a big win for wide-scale conservation?

Me: Goodness, yes. Beforehand, trapping was focused in parks and reserves. But outside the reserves, there was a mass of predators ready to flow back in. What PF2050 has accomplished is to give us the idea that there is no 'outside'. The reserve is everywhere.

TT: So you've already seen rewards?

Me: You bet! In 2021 we had the first korimako (bellbirds) in Auckland in 100 years. Soon there'll be kākā all over the city too.

TT: Well, it sounds like you should all keep at it!

But seriously, this is just a fantasy. If New Zealand really is predator free by 2050, there won't be any willing time travellers. They'll all be so captivated by the endlessly varying birdsong, the haunting notes of kōkako, the resounding booms of kākāpō and shrieks of kiwi, as well as wētā under every stone, and the enthralling colour-changing geckos – they simply won't want to leave. Not even for a moment.

Professor Rachel Fewster is a statistician in the Faculty of Science and co-ordinator of CatchIT, used for community conservation projects.

"Given limited resources, where should we focus our effort to make the greatest gains?"

– Professor Jacqueline Beggs, School of Biological Sciences

TIPS ... TO SLEEP BETTER

Sleep is a vital factor in our overall well-being. Dr Karen Falloon has seven tips to improve your chance of getting a good night's sleep.

Dr Karen Falloon
Photo: Elise Manahan



1 Prioritise sleep
Sufficient sleep is vital to our well-being. How we sleep influences how we live and experience life – our disease risk, brain health, immune function, how we feel, memory and learning, our productivity, creativity, emotions and relationships. But in our busy lives, how can we prioritise sleep? It may help to consider what's important to you and how better sleep connects with that. For example, I'm a happier, calmer, more energetic and playful māmā when I've slept well, so I make it a priority.

2 Follow a routine
Our brain and body love routine so wake at a regular time and sleep at a regular time. Give yourself enough opportunity to sleep so that you feel refreshed the next day (most healthy adults need seven to nine hours). Eat meals around the same time each day, especially breakfast. Exercising daily for at least 30 minutes can also increase deep, restorative sleep. Create a consistent evening routine. One to two hours before bedtime, try a 'brain download'. This could involve journaling, writing a 'to do' list or a constructive worry list with any concerns you have and the next step you could take to address these. Put the list aside until the morning. In the hour before bedtime, avoid using computers, your phone and social media as the stimulation increases alertness. Then start your personal wind-down routine e.g. a shower, gentle stretches, then reading a book.

3 Calm your nervous system
Incorporate a relaxation practice in your daily routine so you are more likely to transition into an easeful sleep at bedtime. Choose whatever resonates and stick with it, such as yoga, mindfulness meditation, breathing exercises, walking in nature. Be conscious of the dose and timing of any caffeine. Even five to six hours after consuming it, half of the caffeine can still be in your body. It can fragment sleep and reduce deep sleep (even if you 'fall asleep fine' after caffeine), leaving you feeling unrefreshed in the morning. Beware of alcohol. While some might find it relaxing, alcohol can lead to fragmented, poorer quality sleep. It can also cause snoring in those who don't usually snore and possibly obstructive sleep apnoea (brief pauses in breathing) in those who already snore.

4 Let there be light ... but not at night
Have natural light exposure and be active during the day, dim light and quieter activity in evenings, and darkness in the bedroom. Morning bright light, when received by our brain at around the same time every day after waking, is a powerful time signal for our body clock/circadian rhythm. Exposure to daytime light can also help our energy and mood.

5 Be clear what bed is for
Using the bed only for sleep creates a powerful association that that's what your bed is for. That association is lost if you also think, watch, do work, or become irritated in bed. The consequence is that you may get into bed and feel alert. You can support this bed-sleep association by getting out of bed if you are not asleep in 20 minutes or so, and moving to a comfortable, dimly lit space to do something low-key such as reading. Only go back to bed when feeling 'sleepy-tired'. If you wake overnight, follow the same steps (avoid checking your phone or clock). Also make sure you get up and out of bed in the morning, once you have woken.

6 Get your timing right
Falling asleep is not like flicking off a light switch. It's more like catching a wave – we need to do some preparation and then it's all about timing. It involves the synchronisation of both the build-up of enough sleep pressure due to daytime wakefulness, and the timing of the circadian rhythm. Waking at a consistent time each day and going to bed at a regular time that is appropriate for your circadian rhythm is important to help catch the 'wave' of sleep when it comes. Getting into bed before your brain is ready to sleep means lying in bed awake. This can lead to thinking, ruminating, or being anxious about not sleeping. When it comes to weekends, sleeping in tends to make it harder to wake up early on Monday morning, so stick as close to your consistent wake time/bedtime as possible to make this easier.

7 Seek help if you need it
If you have persistent or frequent difficulty sleeping, regular or loud snoring, restlessness in bed, or are frequently tired or sleepy during the day (despite reasonable opportunity to sleep), seek assessment from your GP.

Dr Karen Falloon is an academic GP and senior lecturer in the Centre for Medical and Health Sciences Education, at the University of Auckland. She is a member of the Australasian Sleep Association and the World Sleep Society. Her PhD investigated the effectiveness of a behavioural treatment for insomnia.

Power & passion

Glen Dromgoole is reaching new heights with his electric chopper in the US, writes Owen Poland.

When it comes to Kiwi ingenuity, developing the world's first electric-powered helicopter for the delivery of life-saving human transplant organs has to be right up there.

"We looked at the power requirements for the helicopter and the performance of the off-the-shelf technology and realised we might be able to achieve a half-hour flight – and that was the starting point," says alumnus Glen Dromgoole.

With a masters in mechanical engineering (1996), Glen headed to the US and secured his first job, working with Kestrel Aviation to develop a light aircraft that drew on his experience at the University's Centre for Advanced Composite Materials. "That was the stepping stone, doing the masters in advanced composites opened up opportunities and got me into aviation."

After spending more than a decade involved in the development of commercial and military aircraft for the likes of Gulfstream Aerospace, Northrop Grumman and Boeing, Glen founded Tier 1 Engineering – a consulting business based in California that led to the electric helicopter project. His client is US entrepreneur Martine Rothblatt, who wanted a 'green helicopter' to deliver genetically modified pig organs being developed for human transplants in the US by her United Therapeutics biotech company.

After their first meeting in 2015, Glen selected a Robinson R44 helicopter for the prototype and replaced the heavy Lycoming piston engine with an electric motor and batteries sourced from the automotive industry, "cobbling together components and building it on the bench".

Despite predictions in the aviation community that it would take 50 years to develop an electric-powered helicopter because the batteries are too heavy, the first ground test took place within six months. The project has since chalked up four Guinness world records, including firsts in electric flight, farthest distance and longest duration.

Six years on, the third generation all-electric aircraft known as Bird 3 gained a crucial experimental airworthiness certificate in early 2022 to authorise its first test flight – lasting three minutes – with pilot Ric Webb and Martine at the controls. "If there's a chance to go on a test flight or work with the engineers to understand where



the project's heading, Martine's in the mix and fearless when it comes to challenges," says Glen.

The key challenge is having sufficient battery power to sustain the targeted one-hour flight.

"There's a compromise in terms of aircraft payload and range."

Glen is confident his team will achieve full certification by 2025, given improvements in lithium cell technology and building on an already certified helicopter. In spite of concerns in New Zealand over the Robinson's safety, he says flying in this country is different from the airspace in which his electric choppers will fly. "New Zealand has difficult terrain and very challenging conditions. There's nothing wrong with the Robinson."

While billions of dollars are being invested by around 200 companies worldwide in the development of electric-powered vertical take-off and landing (eVTOL) aircraft (drones), Glen says they face a long road to certification compared with his modification of an existing aircraft.

"Realistically, most of them will not fly. The aviation standard, to ensure they don't interfere with other aircraft in flight or pose a hazard to people or property on the ground, is very high."

With around 7,500 in circulation, the R44 could be a lucrative market for retrofits. The Robinson Helicopter Company has "thanked us for the publicity," says Glen. "They see the potential to have an all-electric option on the R44."

There's another Kiwi connection. The magniX electric motor that powers Bird 3 is made by a US company owned by expat Kiwi billionaire and alumnus Richard Chandler (MCom). Glen is also grateful for the early theoretical work performed by another Kiwi, Rob Grigson.

Glen is the son of former University of Auckland botanist and diver Frank Dromgoole, who highlighted degraded marine habitats caused by overfishing in the Hauraki Gulf in the 1960s. He is also related to late Auckland ferry owner Leo Dromgoole, who dabbled with revolutionary vessels such as hovercraft and hydrofoils.

"He was a bit of a pioneer in terms of marine transport. Maybe that's where I get some of my innovation from."

"It was really just cobbling together the components and building it on the bench."

– Glen Dromgoole, founder of Tier 1 Engineering

Glen Dromgoole is making great advances with his electric helicopter. YouTube interview with Glen [tinyurl.com/YouTube-Glen-Dromgoole](https://www.youtube.com/watch?v=tinyurl.com/YouTube-Glen-Dromgoole)



Reimagining democracy

More people live in autocratic regimes than in liberal democracies. **Matheson Russell** talks with Gilbert Wong about ways everyday citizens can have a stake in the future.



When it comes to the state and future of democracy, the think tanks, global policy experts and journalists are pessimistic.

“The world is becoming more authoritarian as autocratic regimes become even more brazen in their repression,” was the pronouncement of the Stockholm-based International Institute for Democracy and Electoral Assistance in its *Global State of Democracy Report 2021*.

The Economist has taken a snapshot of the state of democracy worldwide since 2006. Its 2021 report, *The China Challenge*, found that less than half the world’s population lives in a democracy of some sort and just 8.4 percent in what it regards as a ‘full democracy’. Of 167 countries *The Economist* looked at, 75 could be considered partly democratic, but 57 as authoritarian regimes. The report produces a Democracy Index to distil its research. In 2021, it was 5.37 out of a possible 10 and has been declining since the global financial crisis of 2008. New Zealand ranks well, second after Norway and ahead of other Nordic states that regularly populate the top five.

The Pew Research Centre asked people in 17 advanced economies what worried them about their democratic political system. More than half, 56 percent, said their political system needed major change or total reform. But of those polled in eight of the countries, about half said they had little or no confidence their system could effectively be changed.

“When the Berlin Wall fell in 1989, we were told it signalled ‘the end of history,’” says Matheson Russell, an associate professor of philosophy. “The Cold War was over, the communist cause defeated. Liberal democracy had won the day.”

Thirty years later, that optimism has been dispelled. He says democracy faces enormous challenges. From climate change to economic inequality, from the splintering of mass media to the rise of disinformation and extremism. The voter turnout in major democracies keeps falling, matched by polls recording low satisfaction with governments. It has not taken long, he says, for ‘the end of history’ and the triumph of liberal democracies to become a ‘democratic recession’, a phrase coined by political scientists.

Matheson offers a counterpoint to the gloomy

narrative. “Under our noses, democracy is being reimagined and redesigned around the edges of existing democratic institutions.”

He says citizen-led decision-making processes are being experimented with to counter the loss of engagement by ordinary people in decision-making. They are based on sortition, an ancient practice from the cradle of democracy when Athens was a city state from 600 BC.

“Sortition or lottery was a central feature of ancient Athenian democracy,” he says.

“Citizens could participate in the business of politics. In particular, the ecclesia, or plenary assembly, was open to all citizens.”

But the ecclesia was not a law-making body. Its role was limited to debate on certain predetermined issues. Most of the business of political decision-making took place in other bodies, including the Boule, the 500-member governing council, which set the agenda for assembly meetings; the Nomothetai – the legislative body; and the Dikasteria – the courts – each of which involved hundreds of citizens.

Citizens weren’t elected to these bodies. Each year, about 6,000 citizens were randomly selected. From these, individuals were chosen by lot to become members for a term. “The lottery system meant citizens would rotate through political offices over the course of their lives.”

Renaissance Italian city-states like Florence also used lotteries in some parts of their political systems, making random appointments to law-making and other bodies. The Florentines saw the lotteries as an essential tool to prevent factions from manipulating the political process.

In 2016, the Irish government trialled sortition. Ninety-nine randomly selected citizens, a cross-section of society, considered the contentious issue of abortion law reform. Over several months, this Citizens’ Assembly interviewed experts, weighed up medical, moral and legal considerations, deliberated, drafted and voted on a set of recommendations. Politicians who observed the assembly’s deliberations were impressed by the rigour of the process and the quality of the recommendations. In 2018, Irish abortion laws were liberalised through a referendum and an amendment to the Irish Constitution.

Matheson says, “The Irish public were able to

“When the Berlin Wall fell in 1989, we were told it signalled ‘the end of history’.”

– Matheson Russell, associate professor of philosophy

see people like themselves conscientiously working through a matter of complexity and gravity. Ultimately, the work of the Citizens' Assembly was instrumental in moving Ireland forward on a politically deadlocked issue."

Referenda are sometimes touted to give citizens a say in contentious political decisions in New Zealand but a common issue is a knowledge gap. How can voters reach an informed view on what is often a difficult moral and ethical choice?

A successful model is operating well as a standard part of the process in Oregon, US. Before a referendum, between 18 and 24 citizens, randomly selected to be representative of the population, are asked to consider the ballot initiative in depth. They meet for three to five days to learn about it and deliberate. As part of the process, they interview proponents and opponents of the ballot proposal. Their research is summed up in a citizens' statement, sent to all voters with the ballot papers. The statement is a one-pager explaining what the ballot initiative is and summarising the main arguments' pros and cons. The statement also reports on how the Citizens' Review panel intends to vote. This has been a permanent part of the process in Oregon legislature since 2011.

Iceland faced political turmoil following the global financial crisis. Following public pressure, the parliament agreed that the Constitution of Iceland should be completely rewritten. A coalition of activists, scholars and community leaders came up with a novel process including a National Assembly of 1,500 randomly selected Icelanders. The Assembly used crowd-sourcing as a way for the wider public to contribute ideas for a new constitution. The next stage saw 950 randomly selected Icelanders appointed to a national forum, facilitated by Anthill, a coalition of academics, politicians and community leaders

representing civil society. From there, Iceland held an election for 25 citizens to form an assembly to draft the new constitution, encompassing the work of the previous bodies.

The reshaping of the Icelandic Constitution combined sortition, election, crowd-sourcing, digital participation and referenda. The result is the most inclusive constitution in history. It included radically new ideas, such as the nationalisation of previously unowned natural resources, the right to access the internet and the right of citizens to initiate referenda on laws.

"The entire process met with opposition by the political establishment. They resisted putting the draft constitution to a referendum. When it did go to a referendum in 2012, it was supported by two-thirds of Icelanders," says Matheson.

"But the political establishment was ultimately successful in preventing the new constitution being passed into law. Despite that, the Iceland experiment shows how narrow our imagination of democracy is."

Yale political scientist Hélène Landemore observed the Icelandic constitutional drafting process in person. In her book *Open Democracy*, she writes: "[It] emboldened me to conclude that the limits of our current systems, as well as the changes brought about by globalisation and the digital revolution, call for a radically different approach to the question of the best regime ... one that interrogates the very institutional principles of democracy as we practise it today."

Matheson says these examples offer lessons for the evolution of liberal democracies.

"Randomly selecting people to make important decisions might seem a bit crazy, but what we have learnt from experience is fascinating. Ordinary people are perfectly competent to make complex decisions if they are given the opportunity, the context and resources to do it." ■



Opposite page: Matheson Russell. This page: In Ireland, the Citizens' Assembly helped the country move forward on a politically deadlocked issue. Bottom right: Protests in Oregon. First three photos: Mario Murè/MTMS



A longer version of this story appeared in *Mātātaki: The Challenge*, a repository of stories about our researchers tackling national and global issues, at auckland.ac.nz/the-challenge. Listen to Matheson Russell at tinyurl.com/RTB-RNZ-democracy

NATURAL CONNECTIONS

Auckland University Field Club reunited for three days to celebrate its 100th anniversary.



Bruce Hayward met his wife Glenys Puch at Field Club. Photo: Olaf Petersen, Auckland War Memorial Museum Tāmaki Paenga Hira

Over a highly memorable weekend in October, more than 150 alumni reunited to share their love of the environment and special connections made during their time in the Auckland University Field Club (AUFC).

AUFC was formed in 1922 and although it ended in 1992, members representing several decades organised a centenary celebration. It involved dinners for each decade's cohort, presentations and, despite some weather issues, field trips to Motuihe, the Leigh Marine Centre and a favourite haunt at Kawerua, Northland.

One of the organisers of the event, AUFC life-member Dr Bruce Hayward (PhD, geology, 1976, member from 1969-75), says Field Club meant a great deal to many people.

"It kept us sane and carried us through our degrees. My first degree was about the rocks I'd been introduced to on my first Field Club trip – to the Table Mountain area in the Coromandel Ranges."

He says results from the annual natural science

research trips were published in the Field Club's scientific journal *Tane*.

"AUFC had a scientific hut at Kawerua on the coast out of Waipoua Forest and one aspect of this 2022 reunion was for 40 ex Field Clubbers, as guests of Te Roroa iwi, to revisit this location."

Bruce says the club was excellent at match-making too. "I met my wife Glenys through the club, as have more than 100 couples that we're aware of. Five of the eight members on the centenary reunion-organising committee have Field Club partners."

The oldest to attend the reunion was 97-year-old Margaret Brothers (MSc, 1948, AUFC 1943-48), the widow of Professor Nick Brothers (Geology Department). She also met him through AUFC.

David English, 81 (MSc Hons, botany, 1966), spent several years on the Field Club committee and co-editing *Tane*. He joined the club after a botany trip to National Park. "It wasn't a Field Club trip, but friendships developed and my interest in the great outdoors was unleashed," says David. "My fascination with native plants began and I was encouraged to join Field Club."

David mooted the idea of the 100th reunion after he received an email from the University for its fundraising campaign to fight kauri dieback. He contacted Field Club associates to encourage them to donate and among those was Bruce. The pair ended up spearheading this reunion, which included presentations by a postgraduate researcher on kauri dieback.

Incredibly, all members of the organising committee for the 50th-anniversary reunion in 1972 were present at the centenary.

Another to assist was Carol Gunn (MSc Hons, cell biology, 1984). She joined Field Club in the 1980s. "Every term break there was a trip somewhere exciting. I vividly remember all the trips, including to Kauaeranga Valley, Whangamumu, Lake Tarawera, Great and Little Barrier islands, and many trips to the old hotel at Kawerua. We hired vans, packed old A-frame canvas army tents, and loaded up piles of food to satisfy hungry students for a week or a weekend.

"Those shared experiences still bind many of us deeply."

Bruce summed up the weekend: "At the heart of the reunion was reconnecting with Field Club friends, many of whom hadn't seen each other for years. People's shared interests in the outdoors and the environment have transcended the decades."

Fight Kauri dieback: auckland.ac.nz/kauri-dieback-fund

"Field Club kept us sane and carried us through our degrees."

– Dr Bruce Hayward, Field Club life member

The committee for the 50th reunion. Top from left: Ralph Woods, Dave Court, Alan Bollard, Bruce Hayward. Bottom: Chris Patterson, Sue Woods, Bill Rae. And for the 100th reunion, far right, in the same positions.



CULTURAL CHAMPION

Ken Gorbey tells Megan Fowlie he is treating his ninth decade as he would a museum exhibition: he's determined to make it an engaging experience.

Perched on a craggy hilltop overlooking Wellington's wildlife sanctuary is New Zealand's "rarely spotted Gorbey". It's not a bird but archaeologist-turned-museologist Ken Gorbey. He gained the moniker years ago, as watchers snatched glimpses of him rushing between meetings to hasten the opening of Te Papa in 1998.

His movements are closer to home these days. He settles into his office every morning. "Don't laugh," he says. "I'm writing a novel."

He suggests it is a possible affliction of age.

The octogenarian says that rather than celebrating his birthday, he is enjoying his ninth decade so he can "spread it out". It speaks volumes of his penchant for creating an engaging enduring experience of the present.

Ken grew up around Waikato and Auckland. His father, a teacher, moved every two years. In the late Sixties, he attended the University of Auckland, in the same year as Dame Professor Anne Salmond. He recalls Anne as the shining star. "I was always coming up the rear."

He puts down the decision to go to university at Auckland as a case of lacking imagination.

"It was just a bus ride away."

The truth though, was Auckland was still not his first choice. He had saved £1,000 to buy a Volkswagen and trot across Asia over to London. But his four compadres got married. "Idiots" he calls them. "They saw the romance in the opposite sex, not travelling to India."

After completing a double degree in anthropology and cultural geography, followed by a Master of Arts, Ken worked on the Kapuni gas line, then became director of Waikato Museum, from 1969 to 1983.

"Museums were a good way of doing archaeology," he says. But it wasn't going to last. Waikato Museum took Ken into his lifelong career of cultural management. He was "captured" by the intellectual side of management, and the writing of scholars who were "futurologists".

At the same time, he discovered the excitement and reality of novels. In the great novelists, he found storytellers who considered concepts, developed narratives of alternative future states, and the power of story which stirred profound



Golden Graduate

emotion. Ken drifted away from his attachment to archaeology and museums anchored in the past.

Ken is most well known for his legacy as a cultural champion spearheading two museums on either side of the globe. He spent 15 years bringing Te Papa Tongarewa to life, achieving cultural experiences renowned for being "bicultural, scholarly, innovative and fun".

Te Papa is often credited in museological debate as a place thrown open to an ever-widening span of cultural perspectives. Later, he was shouldertapped to "rescue" a political hot potato, the imperilled Jewish Museum Berlin.

"Everyone expected it to fail, be boring, but it went on to be the most visited, and acclaimed as the most friendly museum in Germany."

Surprisingly, Ken is equally proud of a much lesser-known project. Commissioned by Major Projects Victoria, he was tasked with bringing life to the Melbourne-fringing city of Geelong. Everyone expected a museum, but Ken saw the need for a central public library.

"That was a great feeling of achievement – running about 800,000 visits per year." In fact, it is libraries and books where he sees the true renaissance of the humanities.

From Waikato, Te Papa and Berlin, Ken gained a reputation as a bulldozer, a ringmaster, a disrupter and a radical. He brought in these ideas of storytelling, magical theatre, and customer-facing institutions aimed at drawing in "the 60 percent of people who couldn't give a stuff about museums and collections". It's a complex area that challenges many of the fondly held fundamentals of international museology, like collecting for the future – "what, which future?"

For a long while, Ken has been concerned with equity and finding a way for museums to "abandon the threshold". Now, more than ever, he is fixated on climate change.

"Our buildings are too big. Our air conditioning is environmentally demanding. We collect because we can. I am looking for a future that is somehow lighter. That will keep me going until I pop my clogs."

Ken Gorbey has had a lifetime career in museums, documented in his book *Te Papa to Berlin* (Otago University Press).



GOLDEN GRADUATES

Our Golden Graduates are those who graduated from the University of Auckland 50 or more years ago, along with graduates aged 70 and over.

Anthony Doesburg catches up with three alumni living in three different places overseas, all carving out interesting careers.

AMY JOO-YEONG KIM *Seoul, South Korea*



Amy, second from left, at the 2019 Blizzcon event in California, with colleagues from around the world.

Amy Joo-yeong Kim knows all about change. The 31-year-old University of Auckland arts graduate spent the first decade of her life in Korea and the next in New Zealand.

But since 2011, Amy has been back in the Korean capital, Seoul, a city that never sleeps and a far cry from the “chill Kiwi vibes” she loved in New Zealand.

Fittingly, in a place brought to a global audience by the Netflix series *Squid Game*, Amy works in computer gaming and e-sports, for

“When my tutor introduced the concepts of Bitcoin and mining in 2010, I remember being astounded.”

which her Bachelor of Arts in film, television and media studies, with a minor in drama, seems to have been tailor-made.

“The gaming industry is a form of ‘new media’ that was covered in one of my courses. Also, working in e-sports is closely related to live production, YouTube and Twitch streaming, and all the live studio experience I had at the University really helped to build my career.”

Twitch.TV is a live online channel for gamers that at any time has more than a million viewers. If it flies under most people’s radar, so too would the use of blockchain technology, the underpinning of cryptocurrencies such as Bitcoin, in game development.

But that’s the cutting-edge of the industry in which Amy works at KakaoGames, following a six-year stint at Blizzard Entertainment, creator of two of her favourite games, *World of Warcraft* and *Hearthstone*.

Her new-media studies opened her eyes to blockchain.

“When my tutor introduced the concepts of Bitcoin and mining in 2010, I remember being astounded by this new thing that was happening in the world.

“If I could go back in time, that would be when I would return to, and I would start mining and investing.”

A decade on, the mass adoption of blockchain in gaming is bringing about the same buzz.

“The most exciting aspect of my work is that I can contribute to pioneering gaming’s next-generation technology,” Amy says.

Another contribution she might make was also inspired by her time in New Zealand.

“I actually miss fish and chips so much that I am seriously considering opening a Kiwi-style fish and chip shop in Korea. I think they will sell.”

PRI UTAMI

Yogyakarta, Indonesia

A feature of New Zealand's status as the 'shaky isles' is the abundance of geothermal fields, making the country a go-to place for international students eager to learn about this renewable energy source.

Pri Utami, whose home, Indonesia, is another geothermal powerhouse, first attended the University in 1994 for a short course in geothermal reservoir engineering. After three further study stints at Auckland, she is now head of the Geothermal Research Centre in the Faculty of Engineering at Gadjah Mada University in Yogyakarta, a city of 375,000 people on Java. The island, about the same size as our North Island, has a population of 150 million.

"I studied in different years for different programmes and in between I returned to my country to work as a lecturer and researcher at Gadjah Mada University," Pri says.

A year later, she returned to Auckland for a postgraduate diploma in geothermal energy technology, followed by a research masters in geology three years later. "My research field was Kamojang in West Java, one of the world's rare, steam-dominated fields."

She completed her masters in 1998 and then a PhD in 2011, on features of another Indonesian geothermal field, Lahendong, in North Sulawesi.

Pri credits the University's motto, *Ingenio et Labore*



Pri Utami, right, with student Satria Widi in the Dieng volcanic complex, Central Java. The cone-shaped mountain is the Sundoro volcano.

(by natural ability and hard work), along with New Zealand's status as an international exemplar of geothermal research, education, development and community engagement, with getting her where she is. Indonesia's geothermal power-generation capacity of about two gigawatts is double New Zealand's, yet Pri continues to take every opportunity to work with geothermal scientists and engineers in this country.

"I communicate with Kiwi colleagues about visiting again for further collaboration. I miss many things about New Zealand, including geothermal places in the Taupō volcanic zone.

"The thing I miss most is its pristine nature. I used to spend weekends exploring with the Auckland University Tramping Club, visiting beautiful places and enjoying outdoor exercise."

It was a good antidote to study, Pri says.

"It would refresh my mind from the daily routine of student life."

"I miss many things about New Zealand, including geothermal places in the Taupō volcanic zone."

JONATHAN LEE

Stockholm, Sweden

A job at the world's biggest music-streaming company, Sweden's Spotify, might seem aspirational but unlikely for a young Kiwi.

For Jonathan Lee, who completed a conjoint Bachelor of Commerce and Law from the University of Auckland in 2016, it was almost incidental. "I moved to Sweden for love, actually. I met a wonderful lady while on exchange for my last semester and the rest was history," Jonathan says.

Not that he would have been hired by Spotify, which analyst MIDiA says has about 30 percent of the streaming market, without the right background. The commerce side of his degree has majors in marketing and finance, and he specialised in tax on the law side, for which he credits his law lecturer.

"Big shoutout to Professor Michael Littlewood for the inspiration. Not only would it have been extremely difficult to get a start in tax law without my degree, but it also inspired me to go down that path in the first place."

A job at PwC in New Zealand led to one at the same firm in Stockholm, from where he went to Spotify, where he's now working as a senior analyst in transfer pricing, which means he's involved in making sure that Spotify fulfils its tax obligations around the world.

"I love working for a company that is modern and relevant, but honestly, the most exciting aspect of Spotify is its culture.

"I feel I can bring my whole self to work every day, which you can't say about every workplace."

And Stockholm has plenty going for it, too.

"It strikes a perfect balance between being lively enough that you always feel like there is stuff going on but at the same time not being so hectic that it stresses you out."

"I can bring my whole self to work every day, which you can't say about every workplace."

Jonathan with his girlfriend Bella, left, and law school friend Elizabeth, right, who visited Stockholm in July.





Sisters Dani, left, and Tee Hao-Aickin attended the China Conservatory of Music in Beijing before moving to Masterton.

MIXING IT UP

Pop duo Ersha Island went from the China Conservatory of Music in Beijing to high school in Masterton. The sisters talk to Megan Fowlie.

“We wondered, where do we fit, or do we fit in at all?” – Dani Hao-Aickin, half of Ersha Island 二沙岛

Siblings Dani and Tee Hao-Aickin, aka Ersha Island 二沙岛, meet me in a suburban café. It’s a Friday, the one day a week they dedicate to the business end of music-making: photo shoots, interviews, content development, and social promotion.

Dani, 23, has just graduated from the University of Auckland with a Bachelor of Music majoring in popular music studies. She has a string of accolades, winning a top achiever’s scholarship in 2018, and in 2020 earning the President of the Year Award for her work in the University of Auckland School of Music Students’ Association. Tee, 20, is on a year’s break from her undergraduate music degree to focus on the pair’s foray into the popular music scene.

Making layered, lyrical, melodic music is an exploration of self-discovery for the emerging pop duo, who released their singles *Good Day* and *Gut Feeling* in February. After delays, the date 22.02.2022 presented itself. Tee saw it in two lights – a quirky opportunity and an auspicious sign of MingYùn 命運, a predestined gift.

For three years, the sisters attended the China Conservatory of Music in Beijing, Dani studying piano and Tee, violin. But a prolonged, intensely regimented training schedule throughout childhood left them both with elements of trauma about classical music. Later, on the other side of the world at Solway College in Masterton, where they both graduated as dux, they began experimenting with pop music.

“Concrete Acoustics, Amygdala and Retenu.” Tee smiles as she recalls the bands formed with classmates, holding a World Vision concert, and placing at the RockQuest regionals.

Dani says although they are polar opposites in personality, playing together made them realise how easy it was for them “to mix”, while Dani rediscovered her love of music through song writing.

The Wairarapa town, known for the annual Golden Shears competition, is a substantial cultural distance from Shenzhen, Guangzhou, and Beijing where the sisters grew up.

“Our father is New Zealand born, our mother Chinese,” explains Dani. “After the bustle of Beijing, with a population so much higher than New Zealand’s, they wanted something quieter.”

In China, ‘mixed race’ meant the girls were considered foreigners. To counter that, Dani built up an idyllic fantasy of what it would mean to ‘belong’ in New Zealand. Unfortunate slip-ups on arrival, such as being featured as an international student from Hong Kong, fell hard up against racial slurs, making the real experience the opposite to what she had imagined. Dani responded by suppressing her “Asian side” while Tee’s more Caucasian features meant people assumed she was Kiwi.

“In a weird way that was nice,” says Tee. But, with no one to speak Mandarin, afloat from Chinese customs, and the emptiness of provincial New Zealand, Tee says she quietly “lost her mind”.

On many levels, life seemed one of irreconcilable identities, says Dani. “We wondered, ‘where do we fit, or do we fit in at all?’”

“In 2020, we started a platform Where’s the Asians At?! to find other Asian artists and musicians in New Zealand. Through talking with them, even if they are not mixed-race kids, we found their stories are similar,” says Dani.

It has helped set in motion reconnections on their own terms.

Earlier this year, the pair were awarded a \$35,000 grant from the Asian Arts Fund, by Foundation North in partnership with Creative New Zealand, to produce their first EP *Back to Our Roots*. It explores their past, and the loss and reclamation of cultural identity in mixed heritage and third-culture kids.

Alongside the EP, they are filming a mini-documentary showcasing the artists they are working with and shedding light on the struggles and strength of these creatives in Aotearoa.

Dani says right now their music is centred on being “biracial”.

“We are writing in English and Mandarin, and we’re inspired by a lot of authentic Chinese music.”

“I’ve realised we can embrace both identities,” says Tee. “We don’t have to identify with either – but the mix of the two.”

Tūpuna inspiration

PhD student **Te Kapua O'Connor** worked with mentors to transform his research on Māori ancestors into an accessible book. By Julianne Evans

Caught in a storm on his way from Hawaiki to Aotearoa, Ngāti Kuri navigator Pi spotted land behind him when all others were looking ahead and he cried to the captain: “E Pōhurihanga, kei muri kē te whenua, hurihia te waka.” (Pōhurihanga, the land we seek is behind us, turn the waka around!)

This story, says Te Kapua O'Connor, a Ngāti Kuri descendant in the second year of a Māori Studies PhD at Auckland, is a fitting metaphor for the value Māori place on *kōrero tuku iho* (histories), and of the past being inseparable from one's identity and sense of self in the present.

It features in *A Fire in the Belly of Hineāmaru*, 24 stories of Māori tūpuna (ancestors), from Te Hiku in the far north to Tāmaki Makaurau. It is co-authored by Te Kapua and Professor Melinda Webber, head of Te Puna Wananga at the Faculty of Education and Social Work, and translated into te reo Māori by Te Tai Tokerau language expert Quinton Hita.

“Melinda and I first worked together on the Starpath Project, which focused on Māori secondary student success,” says Te Kapua.

“We visited high schools in the north and their resounding message was: ‘We can achieve incredible things when we're reminded that our tūpuna were incredible, and greatness when we know we descend from greatness.’”

He says while many ancestor stories exist, not many have been collected in an easily accessible book and, given that New Zealand history is now compulsory, teachers will be looking for resources.

“Melinda, like her ancestor, the eponymous Hineāmaru, is also a woman of action, securing a Marsden Fast-Start Grant and leading a kaupapa to feed tamariki, taiohi and their whānau with our histories,” he says.

Once they started looking, they found stories “everywhere and anywhere”, including in PhDs and other manuscripts. “But then we put another layer on top by talking to people and getting their interpretations.”

The project took shape thematically around the ancestors' qualities, with headings like ‘peacemakers’, ‘entrepreneurs’ and ‘political leaders’.



Pukapuka

There was a turning point in Te Kapua's involvement after two years of full-time research.

“Melinda asked me to be co-author, to recognise ‘the immense work’ I'd put in, even though I was still in my mid-twenties when many are still growing the feathers required to fly like the proverbial manu.”

He believes his connection with leaders like Melinda and Dame Cindy Kiro, one of his masters supervisors, and Associate Professor Te Kawehau Hoskins (Pro Vice-Chancellor Māori), whom he met while training to be a teacher at Epsom, has made a vital difference to his success.

“I was surrounded by these great role models, and I also learnt how to engage with communities and research participants. It really does matter who you have in your corner.”

Once the material was gathered, the writing process involved intense periods of retreat in which Te Kapua and Melinda read aloud what they'd written. “We both have a background in academic writing. We wanted to make it engaging and entertaining for a general audience.”

Quinton Hita, who translated around 60,000 words, contributed his own refinements which influenced the English version, essentially making him the third author, says Te Kapua. And the work of renowned New Zealand artist Shane Cotton is featured on the cover of both books.

“It was important to us that the books be beautiful aesthetically; our people deserve no less. I still remembering gasping when I first saw what would become the cover painting. It was perfect.”

Now with the expertise of the Auckland University Press team and a mapmaker, the six-year project is finally complete, which Te Kapua says “feels a bit scary. Other people will have different perspectives. However, a supporter reminded us that without these projects, our histories will be lost, just like the moa, and that gave us the strength and confidence to continue.”

“We have always positioned these books as a starting point in the ongoing journey to revitalise our Māori histories. We hope they plant a seed of inquiry in the young and old of Te Tai Tokerau to learn about who we are.”

Te Kapua O'Connor says strong mentors have helped him in his academic research. Photo: Dean Carruthers

“It really does matter who you have in your corner.”

– Te Kapua O'Connor, co-author and doctoral student



A Fire in the Belly of Hineāmaru: A Collection of Narratives about Te Tai Tokerau Tūpuna, and Ka Ngangana Tonu a Hineāmaru, He Kōrero Tuku Iho nō Te Tai Tokerau. By Melinda Webber and Te Kapua O'Connor, Auckland University Press, \$60



Graci Kim says her first writing effort failed but the feedback was vital.

Photo: Billy Wong

AMAZING GRACI

Auckland's bestselling children's fantasy author **Graci Kim** is full of surprises. She talks to Janet McAllister.

Graci's first book was *The Last Fallen Star*. Her *Gifted Clans* trilogy is inspired by the Korean mythology of her childhood.

Of all Graci Kim's fabulous real-life adventures, this might be the best: she (briefly) ran away with the circus at 16. She had been given front-row tickets for her birthday.

"We watched beautiful Colombian men daredevil-dance on a tightrope. Then in the interval, the very, very good-looking one came down and talked to me in Spanish, and I fell in love with him. I still to this day don't know what he said!"

The results: an enjoyable stint of circus ushering; longer-lasting 'obsessions' with salsa and Spanish; and a University of Auckland arts degree including Latin American studies – a swerve from her initial enrolment in law. This was thanks to her university revelation, "realising you can pursue something you have a real passion for and carve a path out for yourself that wasn't packaged for you already".

Following her own passion, carving her own path, has been the Aucklanders' life philosophy ever since – as a Cuban-band member, diplomat in Beijing, and maker of plushie-dreams-come-true. Graci's company, My Thingymabob, turned kids' drawings into toys, endearingly faithful to the sketches: "That was so much fun! Our minds can create entire worlds."

And now her "let's make it happen!" drive has propelled her onto the *New York Times* bestseller list for tweens, with *The Last Fallen Star*. Her appealing, lively debut features secret magic, witch clans, feisty heroines, serious dilemmas,

karaoke and people saying "amazeballs". It – and the two books that follow in Graci's *Gifted Clans* trilogy – is inspired by the Korean mythology of her childhood: her halmeoni (grandmother) would tell her and her two sisters folktales, cuddled up in bed.

Graci's trilogy is set in Los Angeles, home to a large Korean community. As diaspora, says Graci, "sometimes you feel you're displaced, like you don't belong anywhere" and she wants to write books for the child she was. She loved *The Baby-Sitters Club* novel series, featuring Japanese-American Claudia: "The only Asian character I had ever read in a book that wasn't a *National Geographic*."

At the same time as being invisible in books, Graci says she and her family were racially harassed while she was growing up in Auckland. For children, "it's easy to target someone different," says Graci. Her dad's response was to "kill people with love", so Graci invited one of her biggest bullies to her party and, after that, the same kid stood up for her when other children were mean. She thinks it would be useful to teach kids to intervene, even in just a low-key way, when they see overt racism.

"The hardest thing is when you feel like you're alone. If everybody played that small part of clearly stating 'that's not appropriate', that would help."

Graci's second book, *The Last Fallen Moon*, has been published in the US, complete with tie-in online quiz. The secret to success? It's clear Graci



works hard and smart, and, where others might see setbacks, she sees lessons.

“My first writing effort failed – everyone told me the book was crap.”

But inviting criticism was the whole point: learning her craft meant learning to apply relevant feedback. Cue training montage – redrafting, mentoring, emailing agents, pitching – before one particular editor, at Disney-Hyperion no less, gave her 16 pages of daunting feedback. Graci worked through it ...

And? “It was wild! I was literally getting my belly scanned – we were just finding out we were having a baby – and I got the call to say the book was being published!”

Skye, Graci’s baby with husband Neil, is now aged two.

Disney is publishing all three *Gifted Clans* books, and has also optioned them for a potential live-action TV series. The only professional cloud on

Graci’s horizon is Covid – which cancelled planned in-person US celebrations two years running.

“That sucked,” says Graci. “It’s so disappointing. I haven’t met my agent and editor; I feel I’m living some kind of dream I might wake from.”

But fortunately, “the writing is the part I love the most. And when kids get in touch, that’s the best part of the job.”

After an hour in Graci’s effervescent, engaging company – not long enough – it’s clear that’s true. And that this whole fabulous real-life adventure has many exciting twists ahead.



Graci’s company, My Thingymabob, turned children’s drawings into toys, faithful to the sketches.

SEVEN QUESTIONS with Sonya Wilson

Sonya Wilson won the Best First Book Award at the 2022 New Zealand Book Awards for Children and Young Adults, for her teen adventure fantasy tale *Spark Hunter*. The broadcast journalist with a Masters in Creative Writing (MCW) answers *Ingenio’s* questions.

1. You’re from Southland and your book is about fairies in Fiordland, with a 12-year-old protagonist. When did the idea come to you?

The seed was planted in 1991 when I was 12 too, running through the forests of Manapouri and Doubtful Sound, convinced there must be magic involved in a forest that was so supernaturally lush and beautiful. I loved Fiordland as a kid, and as an adult have come to realise how precious that wilderness is. When I decided to have a crack at writing a book, that was the only story my brain wanted to tell and the only place it wanted to set it.

2. Your mum kept exercise books in which the kernel of your story appears. Did that help?

Yes, luckily Mum and Dad had a large shed to store all my old school junk; I’m very grateful.

3. Is there any other place you love as much as Fiordland that could spark a new novel?

It doesn’t seem so at the moment. I’ve just started writing my second book, which is the sequel to *Spark Hunter* and is also set in Fiordland. I have an idea for an adult novel too, or at least a character who won’t leave me alone – she keeps popping into my head demanding I write her story and I’m afraid she, too, is a Southlander.

4. How soon after your MCW in 2018 did you complete *Spark Hunter*?

My first full draft was completed during my masters year in 2017. I worked on subsequent drafts in 2018, then left it alone for about a year before

sending it off to an agent and getting picked up by a publisher. I was still doing rewrites and tweaks up until publication in 2021.

5. Who are your writing mentors?

Paula Morris at the University. I was a journalist who knew how to write a good TV news or current affairs script but not much else, until I joined Paula’s MCW programme. She taught me what good prose writing was, and what good writing was in general, actually – non-fiction writing, too.

6. Are you still involved in TV? Could *Spark Hunter* make it to the screen one day?

I spent a couple of months this year working on a US documentary for one of the big streaming services and I still do the odd story for the *Sunday* programme at TVNZ, but I only really call myself an occasional journalist these days. I’d love to see *Spark Hunter* on the big screen, but it would be very expensive to make. I’ve had a few people approach me about its adaptation, but it’s a matter of finding budget – I hope it happens one day.

7. How can people help your charity called Kiwi Christmas Books?

We gift new books to children and young people whose families can’t afford to buy presents. We’d love people to donate either books or money via kiwichristmasbooks.org.nz, or buy and donate a book through participating independent bookstores (there’s a list on our website). They’ll have donation boxes on site from 1 November.



Author Sonya Wilson
Below: Her winning first book, *Spark Hunter*.

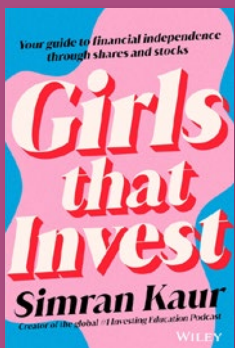


Simran Kaur, left, and podcast partner Sonya Gupthan, in a photo from a shoot with Vogue India.

Photo: Apela Bell

Below right: Simran has a Bachelor of Optometry but has a different future in her sights.

“I graduated with a student loan and a backlog of parking tickets, and a few letters from Baycorp.”



Girls That Invest: Your Guide to Financial Independence Through Shares and Stocks
(John Wiley & Sons)
RRP\$31



Focusing on her vision

Forget skipping your flat white. **Simran Kaur** shares better ideas to grow your wealth in her top-rating financial podcast that targets women. Danelle Clayton finds out more.

On her Instagram, Simran Kaur describes herself as a “kickass Punjabi girl”, and the 25-year-old social media identity certainly seems that.

The Bachelor of Optometry graduate is an unlikely ‘millennial investor’ guru but has one of the most popular financial podcasts in the world.

Simran co-hosts *Girls That Invest* with best friend Sonya Gupthan, who used to work in health insurance. It’s an online phenomenon with more than 190,000 monthly subscribers and 1.8 million downloads to date.

In recent months, Simran has added to that with a book, *Girls That Invest, Your Guide to Financial Independence Through Shares and Stocks*, picked up by global publishing house Wiley, and a six-week investing master class.

“*Girls That Invest* was founded on the principle that investing should be for everyone. We want to demystify the jargon and offer a step-by-step pathway that women everywhere can follow to start growing their hard-earned money,” Simran says.

“Basically, we felt as though minorities and women were being excluded from the world of investing. We’ve been taught to associate money with evil and guilt, that it is something you have to step over other people to obtain, while men are taught it is a marker of success. We want to change that.”

Simran and Sonya are also behind the popular Instagram page @the_indian_feminist,

which Simran started while studying. It calls out misogyny faced by South Asian women living in Western cultures, and has more than 350,000 followers.

Becoming a social media identity, podcast creator and author wasn’t Simran’s plan. She began working as an optometrist two years ago, before Covid saw her stuck at home in 2020, just a few months into her career.

“Graduates my age entered the job market during a pandemic. It has been tough and intense for us; this isn’t what we expected,” Simran says.

“But it did give me time to focus on my social media platforms. They took off, and now it’s my full-time job.”

While growing The Indian Feminist brand from home, Simran realised she was advocating for women to be savvy and independent, but this was undermined by a lack of financial literacy among her followers and peers, and even herself.

“It occurred to me how important financial independence is. I had the privilege of attending the best public schooling in my country, and yet the concepts of personal finance and investing were never introduced to us at school. The only financial education I had was when a bank visited our school to hand out free piggy banks.

“I wasn’t terrible with money, but I wasn’t great, either. I graduated with a student loan and a backlog of parking tickets, and a few letters from Baycorp.”

Simran decided to lead by example and took

a certificate in financial markets through Yale.

“It wasn’t long and intensive, it just gave me a good understanding of financial markets in the US and Canada, and once I applied that to New Zealand, I realised how simple it all was.”

Simran, unapologetically, made her first million by the age of 26 through savvy investments and by purchasing property in her hometown of Hamilton.

“A lot of people say they want to be a millionaire, but what I really think they are saying is they want the freedom that money allows, like choosing to work from home, knocking off at 2pm, leaving a relationship or moving overseas. Having an emergency fund is a vital tool for women, and anyone, really.”

Simran cringes when her generation is told to cut out the flat whites to get ahead. Or when women think they must have a crafty side-hustle to make money, or are targeted with low-brow financial advice like the latest hack to save \$10 on groceries.

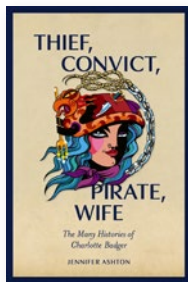
“We want to focus the conversation on how to grow your wealth, whether that’s through upskilling or having tough conversations about pay and salary with your employer.”

Girls That Invest promises to make the powerful tool of growing wealth accessible, with chapters such as Stockmarket 101; Unlearning your money mindsets; Choosing where to invest; and How to buy shares.

But that degree in optometry didn’t go to waste. “In healthcare, you spend your whole day explaining complex information to patients in an easy-to-understand way.

“I’ve always been that friend in class that you go to when you don’t understand something. It’s a natural fit for me and I think not having a degree in finance means I don’t overcomplicate things.”

Website: girlsthatinvest.com



Jennifer Ashton, Auckland University Press, \$35

Thief, Convict, Pirate, Wife: The Many Histories of Charlotte Badger

Alumna Jennifer Ashton (PhD, history) wrote this historical detective work to unravel the mystery of one of our first Pākehā residents, Charlotte Badger. Charlotte was a thief sentenced to death in England, then transported to New South Wales. She became a pirate who joined a mutiny to take a ship to the Bay of Islands, where she became wife of a rangatira.



Selling Britishness: Commodity Culture, the Dominions and Empire

Felicity Barnes is a senior lecturer in history at the University. This book, her second, looks at how advertisers between the wars constructed a shared British identity in Australia, Canada and New Zealand. It explores the role of commodity marketing in creating ‘Britishness’.

Felicity Barnes, Auckland University Press, \$50



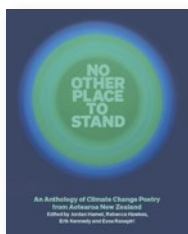
Wawata: Moon Dreaming

Alumna Dr Hinemoa Elder, author of *Aroha*, the top-selling non-fiction book in 2021, explains how to reclaim intimacy using the energies of Hina, the Māori moon. Hinemoa guides us through 30 days and nights of a lunar cycle.

Hinemoa Elder, Penguin Random House, \$35

GIVEAWAY: We have two copies of *Wawata* to give away.

Email: ingenio@auckland.ac.nz by 20 November, with your name and address.



No Other Place to Stand

Subtitled *An Anthology of Climate Change Poetry from Aotearoa New Zealand*, this book features 91 writers grappling with one of the biggest issues facing the planet.

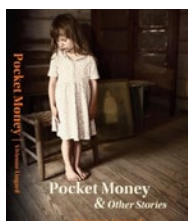
Eds, Jordan Hamel, Rebecca Hawkes, Erik Kennedy, Essa Ranapiri, Auckland University Press, \$30



The Monkey and the Moonbeam

Architecture alumnus Jonathan Smith wrote and illustrated this children’s book about a monkey who flies around the world at night chasing something that’s just out of reach.

Jonathan Smith, Little Love, \$30



WIN!

Pocket Money & Other Stories

In Autumn 2022 *Ingenio*, we highlighted this short story collection by creative writing alumna Vivienne Lingard (Artistry Publishing). We neglected to include the giveaway – so now we’re offering two copies to win. Email: ingenio@auckland.ac.nz by 20 November, with

your name and address and *Pocket Money* in the subject line.

CONNECTION POINTS



Facebook: UoAAlumni
LinkedIn: Auckland University Alumni and Friends
Twitter: @AucklandAlumni
Instagram: @AucklandAlumni
Email: alumni@auckland.ac.nz



NOMINATE

YOUR UNDER-40 STAR

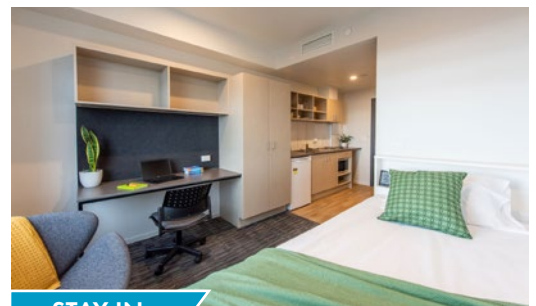
Biannually, the University selects '40 Under 40', alumni under 40 years of age who have demonstrated contributions to their community, profession and the University. There are six categories: business leaders, entrepreneurs, influencers, disruptors and innovators, performers, and humanitarians. To nominate an under 40 contender and read about our past winners, go to auckland.ac.nz/40-under-40



VIEW

ONLINE ARCHITECTURE SHOWCASE

Explore the work of our 2021 School of Architecture and Planning masters students. Their theses respond to a range of contemporary concerns, from housing to climate change, and you can view extracts through a dedicated online archive Modos, modos.ac.nz. (Image: *Library City*, by Cindy Huang)



STAY IN

CAMPUS SUMMER ACCOMMODATION

The University halls will open their doors for Summer Stays between 21 November 2022 and 12 February 2023. If you're looking for group accommodation for a sports team, camp or conference, then Summer Stays can help. The accommodation is centrally located at Carlaw Park, Grafton Hall and Waipārūrū Hall. Catered and self-catered options are available for groups of 20 to 200. Discounts for alumni are available. Find out more information at summerstays.auckland.ac.nz or email: summerstays@auckland.ac.nz.



JOIN

OUR VIRTUAL BOOK CLUB

Keen to broaden your reading repertoire? Join our online book club and connect with others who share a love of reading. You'll read and discuss up to five books a year with other readers across the University community. It's free to join and book club members receive a 15 percent discount on selected club books if purchased through the University bookshop, Ubiq. To find out more about the Virtual Book Club and sign up, go to auckland.ac.nz/bookclub.



VOLUNTEER

ABROAD WITH VSA

Volunteering in the Pacific increasingly relies on professionals with specialist skills to exchange knowledge with local counterparts. Volunteer Service Abroad (VSA) is recruiting for volunteer roles across the Pacific and seeking New Zealanders across multiple industries, including marketing and communications, organisational management, business development, health and sports professionals. VSA works with local partners and international NGOs to advance communities, society and businesses. Volunteering is life-changing – make an impact today. Visit vsa.org.nz.



EXPLORE

YOUR CAREER OPTIONS

Did you know that the University of Auckland's Career Development and Employability Services team (CDES) supports graduates for up to three years after they graduate? People can access online career tools, attend career expos and make appointments with career consultants. There's also a helpful CDES job board, NZUni Talent Jobs (available on our MyCDES+platform). Hundreds of top New Zealand employers are registered on NZUni Talent Jobs, and they are specifically looking for graduates with University of Auckland qualifications – many for an immediate start. If you are looking for a graduate role or the next step on your career ladder, try searching NZUni Talent Jobs. Visit auckland.careercentre.me.



PURCHASE

UNIVERSITY OF AUCKLAND MERCHANDISE

Feeling nostalgia for your varsity days? Check out the range of University of Auckland branded merchandise available at the Campus Store. Offering apparel, accessories, stationery and gifts, including the popular 95bFM range of gear, the Campus Store is in the Quad, City Campus, 34 Princes Street and is open Monday to Friday. Or purchase online at campusstore.auckland.ac.nz.



PARTICIPATE IN

INFANT NUTRITION STUDY

Is your baby getting ready to start eating solids? The University of Auckland is seeking parents/caregivers of 300 babies in greater Auckland, who plan to introduce solids at around six months of age, to participate in an important study. Researchers in the Department of Nutrition want to understand how the introduction of a specific food (kūmara) during complementary feeding influences an infant's gut bacteria and may protect them from respiratory infections. If you or anyone you know is interested, find more information at thesunstudy.auckland.ac.nz or drop the research team an email: thesunstudy@auckland.ac.nz.

WERE YOU AT UOA
IN THE

70s

80s

90s

2000s

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FOR
EVERY
WORLD