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ALUMNI MAGAZINE

SPRING 2025

RAISING OUR SIGHTS

PUSHING THE BOUNDARIES OF EYE RESEARCH

Harnessing the power of art

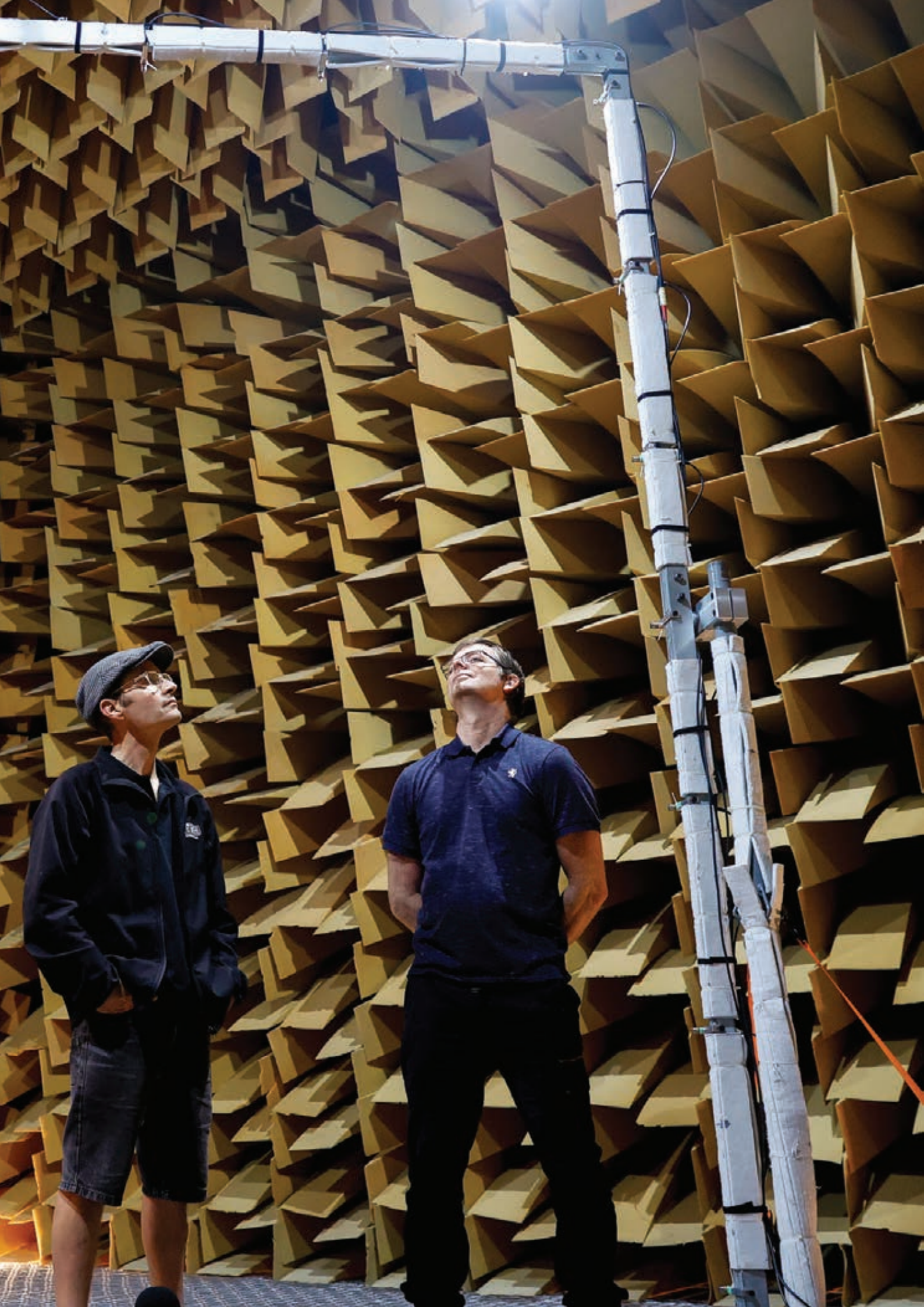
Meet our 40 Under 40

Do protests still work?

BIG PICTURE

FULLY ABSORBED

Gian Schmid and Dr Andrew Hall stand in one of New Zealand's quietest places – the anechoic chamber in the University's Acoustics Vibration and Research Centre. Designed by renowned architect, acoustics engineer and designer the late Emeritus Professor Sir Harold Marshall, the centre was built in 1981-82 and remains a world-class facility. Photo: Chris Loufte



this issue

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Waipapa Taumata Rau
University of Auckland

Editorial

THE RIGHT CONDITIONS

If you have a life partner and you met while attending the University of Auckland, you're not alone; research tells us more than a third of people who attend university will meet their other half there.

It's not why people enrol, of course, but it illustrates a fundamental function of the institution: a place to connect. Students learn from academics, researchers collaborate, faculty teams compete in sports events, international colleagues gather for conferences.

Creating environments that foster these connections and allow them to thrive has been a big part of my role as I've worked with colleagues on long-term campus planning.

When I first began at the University of Auckland almost 20 years ago, I was shown a campus map on which 'fit for purpose' buildings were marked in green – and those green spots were few and far between. Gradually, however, as we've been able to fund them, a series of big and significant improvements have changed that picture.

In 2013, we put together a strategy to consolidate the University's activities in the city centre, identifying it would reap benefits in terms of better connectivity. Acquiring the Newmarket Campus site was a milestone in allowing us to bring that strategy to life. Such a significant site will take time to develop, but it's exciting to see new research capabilities and an innovation precinct already emerging there.

Changes in the physical environment have also played a part in creating a better experience for students.

When I began, we had around 700 student accommodation beds, which were available only to those who lived more than 20km from campus; it effectively meant most students seeking a residential campus experience had to look elsewhere. Thanks to the passion of our Campus Life and Property Services teams, and Council support for further long-term investment, we now have 4,500 beds, with another 1,000 in the works.

Having more students living in our accommodation changes the vibe and culture on campus, and makes it easier for students to join the clubs and other extracurricular activities that underpin student life. The sport and recreation team's development of the inter-faculty sports competitions, which attract big student numbers, and the annual waka ama tournament are great examples. Hiwa, our new world-class rec centre, has further boosted the student experience.

The enquiries we get through our call centre tell their own story.

Over time I've seen the most common student queries shift from things like 'what should I wear to lectures?' to 'where can I heat up my lunch?'. Now that we have largely addressed the lunch question with the opening of Te Kāuta, Student Kitchen and Lounge in the Kate Edger building, I'm delighted that the most-asked question is 'where can I find a space to study?'. We've massively increased the number of study spaces, and are developing more, but this illustrates greater numbers of students are staying on campus throughout the day, allowing them to make more of their university experience.

A persistent challenge when developing long-term plans and projects, however, is keeping up with the pace of change. A new research facility will take years to go from the initial planning stages through to opening, but how do we know what life will look like so many years into the future?

That's where we again draw on that culture of connection. I've always been impressed with our colleagues in Property Services and their commitment to deep collaboration with our researchers and academic leaders. This commitment is crucial to creating the environments and conditions that will allow us to stay at the forefront of teaching and research excellence.

On a personal level, it's been a privilege to be part of these collaborations, through which I've made so many valuable connections of my own.

ADRIENNE CLELAND
Deputy Vice-Chancellor Operations and Registrar
Waipapa Taumata Rau, University of Auckland

SELINA TUSITALA MARSH NAMED COMMONWEALTH POET LAUREATE

The University of Auckland professor says she's honoured to accept the appointment, which is a first in the Commonwealth's history.

When discussing the possibilities that poetry offered her, Selina Tusitala Marsh once said the artform "gave me a voice when I felt I didn't have one".

Now her voice is being heard across more than 50 nations and among more than 2.7 billion people.

In July, the notable New Zealand poet and University of Auckland professor of English and drama was named the inaugural Commonwealth Poet Laureate. The appointment, the first in the 75-year history of the Commonwealth of Nations, will run until the end of May 2027. It involves Selina crafting original poems for flagship Commonwealth events, including Commonwealth Day, the Commonwealth People's Forum, and ministerial and heads of government meetings.

She is also advising on the creative planning for the Commonwealth Foundation – the principal agency for Commonwealth culture – and will appear in person at the Commonwealth People's Forum and Heads of Government Meeting in Antigua and Barbuda in 2026.

Selina, who is of Sāmoan, Tuvaluan, English, Scottish and French heritage, says she was deeply honoured to accept the Commonwealth Poet Laureate role, which is a huge undertaking.

"I have written extensively about the many hats we wear as Pacific people and that applies to myself," says Selina.

"I am the sum of many parts, which includes being an academic and a poet. I intend to navigate this exciting new role with the same passion and energy that I bring to the other areas of my life."

Selina is a former New Zealand Poet Laureate (2017 to 2019) and is an award-winning writer, known for her three collections of poetry and her best-selling *Mophead* children's graphic memoir series. In 2019, she was made an Officer of the New Zealand Order of Merit and a Fellow of the Royal Society of New Zealand. In 2024, she was the first female Pacific writer to be awarded the prestigious Katherine Mansfield Menton Fellowship.

Professor Selina Tusitala Marsh
Photo: Mark Chilvers, commonwealthfoundation.com

Selina has already played memorable roles in Commonwealth events. Last year, she co-hosted the People's Forum at the Commonwealth Heads of Government Meeting in Sāmoa, and in 2016 she recited a poem, 'Unity', which she wrote for the Commonwealth Day service at Westminster Abbey in front of Queen Elizabeth II and other dignitaries.

Selina was the first Pacific person to earn a PhD in English from the University, where she lectures in Pacific poetry and creative writing. She has also written poems to mark significant events on campus, and is co-director of the University's Centre for Arts and Social Transformation (read more about the centre from page 22).

The University's Pro Vice-Chancellor Pacific, Professor Jemaima Tiatia-Siau, says she was thrilled to learn about Selina's Commonwealth role.

"Selina's appointment is an acknowledgement of the natural and rich resources abundant in the Pacific, and our ability to tell and share stories in a unique and compelling way, while keeping our connections strong. Our Tusitala [teller of tales] has led from the front strongly over the past decades and we are so proud that she has been given a well-deserved platform representing all of us in the best possible way."

Full story: auckland.ac.nz/commonwealth-poet

"I intend to navigate this exciting new role with the same passion and energy that I bring to the other areas of my life."

– Professor Selina Tusitala Marsh

News

RESEARCHER NAMED L'ORÉAL–UNESCO FELLOW

Dr Jamie-Lee Rahiri acknowleged for her work addressing health inequities

Dr Jamie-Lee Rahiri is the 2025 L'Oréal–UNESCO For Women in Science Fellow for Aotearoa New Zealand. Photo: Chris Loufte

A strong focus on health equity in surgery has seen Dr Jamie-Lee Rahiri (Ngāti Porou, Ngāti Whātua o Kaipara, Te Ātihaunui-a-Pāpārangi) named the L'Oréal–UNESCO For Women in Science Fellow for Aotearoa New Zealand in 2025.

Jamie-Lee has had a stellar rise as an early-career clinical researcher at the University of Auckland, focused on understanding and addressing health inequities among Māori.

Currently a third-year general surgery trainee at North Shore Hospital, the senior research fellow has been recognised for improving surgical care for Māori patients and inspiring the next generation of wāhine Māori into surgical careers.

"My research seeks to embed equity, and improve the cultural safety and effectiveness of surgical care pathways in Aotearoa," says Jamie-Lee.

Earlier, Jamie-Lee worked with South Auckland communities to improve bariatric surgery outcomes for Māori patients. Now, as a surgical trainee, she's continuing to lead culturally safe surgical care for whānau Māori.

"One of the projects that I'm leading right now, that's quite exciting, is centred on weight-loss outcomes after surgery. This is an area in Aotearoa, unfortunately, that is still growing in the sense that it urgently needs compassion, surgical excellence and equity embedded within its delivery," she says.

Full story: auckland.ac.nz/rahiri-science-fellow

START-UP SMARTS AWARDED

Fostering innovation is recognised as central to the University's vision

The University has been named Innovative and Entrepreneurial University of the Year, recognising its leading approach to start-up creation and innovation.

The Triple E Awards, which were held 10-12 September in Prague, recognise entrepreneurship and engagement in higher education. In this year's awards, 77 finalists from 30 countries competed across a variety of categories.

Vice-Chancellor Professor Dawn Freshwater says fostering innovation is central to the University's vision for the future.

"This award recognises our ambition to be a global leader in innovation and entrepreneurship. It celebrates the creativity and drive of our staff and students, and the way they are helping shape solutions that will benefit Aotearoa New Zealand and the world."

Darsel Keane, director of the University's Centre for Innovation and Entrepreneurship (CIE), says the award recognises how innovation and entrepreneurship are woven through teaching, research and community engagement.

This includes everything from the $40 million UniServices Inventors' Fund to CIE's programmes, which reach more than 7,000 participants annually. Solve It, CIE's innovation programme in which students team up with industry to tackle real-world problems, attracted more than 100 students this year.

"At the heart of this achievement is our belief that universities should both prepare graduates to be innovators, creators and solution seekers, and foster the full spectrum of research, from bold blue-sky exploration to applied solutions that address pressing challenges at home and abroad," says Darsel.

Full story: auckland.ac.nz/triple-e-award-2025

Team Fireant, winners of the University's 2025 Solve It innovation programme. Photo: Sav Schulman

SINGERS ON TOP OF THE WORLD

University choristers among those who helped secure the Choir of the World crown

A strong contingent of University of Auckland students, alumni and staff helped take the New Zealand Youth Choir (NZYC) to the ultimate choral victory this year.

The NZYC won Choir of the World at the prestigious Llangollen International Musical Eisteddfod in Wales in July, securing a title it last held in 1999.

The choir, which features 50 singers aged 18 to 25, includes 12 current Auckland students and ten alumni, who were all guided to victory by University alumnus David Squire, the choir's conductor. David received the Most Inspiring Conductor award for his exceptional leadership and musical vision. He has been the choir's musical director since 2011 and was previously a chorister himself, from 1985 to 1991.

School of Music senior lecturer Dr Morag Atchison has been the NZYC's vocal coach since 2007 and says she's proud to help shape the choral sound and guide the young singers.

All the University student and alumni members of the choir, pictured with Morag Atchison (School of Music) and David Squire at St Albans Cathedral, Wales.

The way the 2025 NZYC members carried themselves in all parts of the competition, she says, shows "they truly are a taonga".

"The way they show such love and pride for all their music is extraordinary, whether it is German Baroque music, sacred Polish music, a spiritual, or music from Aotearoa New Zealand and the Pacific," says Morag.

David ended his NZYC tenure after the win, and Morag says it was the perfect finale.

"There is no more fitting tribute for him to be the conductor of the Choir of the World and the winner of the Most Inspirational Conductor at the Llangollen Eisteddfod."

Full story: auckland.ac.nz/nzyc-win-2025

VC TO STEP DOWN

Vice-Chancellor Professor Dawn Freshwater intends to leave her role in 2026

Professor Freshwater, who became the University's first female vice-chancellor in March 2020 on the eve of the Covid-19 pandemic, will leave the role after almost six years.

University Chancellor Cecilia Tarrant says the Vice-Chancellor has worked tirelessly in the face of extraordinary times for the tertiary education sector and will leave the University in a position of strength.

"Under Professor Freshwater's leadership, the University has sustained its global positioning as a top-100 University, maintained solid financials in an increasingly complex national and global context, increased domestic and international student numbers, and, in particular, seen significant growth in postgraduate students," says the Chancellor.

"During Covid-19, Professor Freshwater supported an extensive staff process to develop a new vision and strategy: Taumata Teitei Vision 2030 and Strategic Plan 2025, which was updated in 2024. This launched a significant transformation agenda, which has been realised in the years since.

Vice-Chancellor Professor Dawn Freshwater
Photo: Chris Loufte

"We are grateful that Professor Freshwater has given us an extended notice period. This will allow the University to commence a full international search for a new vice-chancellor, while maintaining our momentum."

The University expects to formally farewell Professor Freshwater in the first half of 2026.

Full story: auckland.ac.nz/vc-steps-down

RAISING OUR SIGHTS

From unlocking the eye's inner secrets and creating corneas from stem cells to investigating eye drops to replace reading glasses, exciting new possibilities are emerging to enhance and restore human vision. Owen Poland meets some of the University of Auckland researchers who are changing how we see the world.

When Professor of Ophthalmology Charles McGhee (ONZM, FRSNZ) arrived at the University of Auckland from Scotland in 1999, things looked very different from how they do today.

"We've grown from a subsection of the Department of Surgery, with only one-and-a-half senior lecturers, to a standalone Department of Ophthalmology, with 11 professors and associate professors and a total of 89 staff and students," says Charles.

New Zealand's first Chair of Ophthalmology, Charles notes that preserving the gift of sight has become a major focus at the University, with researchers in the Aotearoa New Zealand National Eye Centre (ANZ-NEC) trying to address some of the world's most pervasive problems with potential therapies. Groundbreaking work includes investigating corneas made with stem cells, and antioxidants that reduce the risk of cataracts.

As a clinician scientist, Charles has participated in more than 550 peer-reviewed publications on research programmes, ranging from corneal transplantation to cataract surgery, the use of stem cells, eye chemical injuries and studies in drug delivery.

Describing cataracts as "a terrible burden" that a developed country like New Zealand shouldn't have, he initiated the Auckland Cataract Studies and the New Zealand Cataract Risk Stratification project to reduce surgery waiting times. The project has also reduced significant complication rates, which are now less than one percent.

"The risks for a junior trainee surgeon doing elective cataract surgery and a senior surgeon are now the same because we stratify the patient risks," he says.

Another long-term interest is the diagnosis and treatment of keratoconus (where the cornea thins, bulges and distorts) which is very common among young New Zealanders, particularly Māori and Pacific peoples.

In response, Charles introduced a technique called collagen cross-linking to the New Zealand public health system, which can stop the disease and prevent vision loss by increasing the chemical bonds between the collagen fibres that hold corneal tissue together.

"Probably between 700 and 1,000 cases are now treated each year, and it all largely started with Dr Charlotte Jordan's PhD project in 2007, which involved the University of Auckland and Auckland District Health Board."

On the clinical side, he's trained a legion of junior surgeons and performed more than 1,000 corneal transplants and several thousand cataract procedures. He's also introduced many novel surgical techniques, such as cultured limbal stem cell transplants that regenerate and restore damaged corneas.

And many of those skills are being passed on to a new generation of surgeons at the University's Calvin Ring microsurgical lab, where hands-on surgery is taught with the aid of two virtual-reality simulators.

"You believe you're operating inside an eye doing cataract or retinal surgery," says Charles, "and research confirms this approach consistently reduces complication risk for trainee surgeons early in their clinical career."

Along the way he's supervised around 40 PhD students, including Esmeralda Lo Tam – a New Zealand Sāmoan and one of his keratoconus patients – who is now studying the equity of eyecare delivery, including keratoconus treatment, among high school students and in the community (see page 13).

"We're also creating this whole platform of researchers, which includes a growing number of Māori and Pacific students," says Charles.

As a founding director of the ANZ-NEC – which includes the departments of Ophthalmology, and Optometry and Vision Science, and the Molecular Vision Laboratory – Charles has brought together more than 200 staff and students under one umbrella.

Peer-reviewed grants, industry collaborations and philanthropy have all played a key role in fostering research. He's particularly grateful to the Paykel, Hadden and Gray families for their staunch support of major initiatives, such as his Chair of Ophthalmology, and that of Professor Colin Green.

The department, says Charles, is typically seen "as one big family". "I think that's probably why we appeal to philanthropy. They see what they're getting; they see it's a happy, bustling, fun place to work."

New Zealand's first Chair of Ophthalmology, Professor Charles McGhee. Photo: Chris Loufte

UNLOCKING THE EYE'S INNER SECRETS

A foundation partner of the ANZ-NEC is the University's Molecular Vision Research Cluster (MVRC). Founded by the Department of Physiology's Professor Paul Donaldson, it consists of a multidisciplinary team whose combined expertise provides a rich training environment for the study of eye diseases.

Their groundbreaking cataract research has led to a new understanding of how water and antioxidants flow around the lens within a unique microcirculation system. The work led to a University of Auckland Research Excellence Medal in 2025 for Paul and his team.

"We were one of the first to show how it could potentially be used for new therapies to reduce the incidence of cataract," he says.

Age-related nuclear cataract is the world's leading cause of blindness, and diabetes is another factor contributing to rising cataract numbers. Around 30,000 cataract surgeries are ▶

done each year in New Zealand, with long wait lists, and the condition is an increasing burden on the health system.

"We're getting an epidemic because people are living longer and experiencing the effects of cataract," says Paul. "That's increased by the fact that we're also facing a diabetic epidemic with obesity."

The use of mass spectrometry, to analyse the composition and structure of molecules, has played a key role in helping unlock the inner secrets of the eye. Says Associate Professor Gus Grey: "We've been able to show that there are very different spatial regions in the lens and that has a very particular bearing on lens function."

Supported by a $1.2 million grant from the Health Research Council, Gus will spend the next three years investigating how the uptake and metabolism of glucose in the human lens contributes to diabetic cataract.

"We will be looking at specific proteins and their modifications so that we can better understand how we can develop human-specific treatments to delay the onset of cataract," says Gus.

Joining Gus and Paul on the project is Associate Professor Julie Lim, another MVRC scientist, whose research into the role of oxidative stress in eye disease has enabled the team to make a crucial advance from animal models to human tissue.

One option being investigated is the potential use of the antioxidant glutathione and its derivatives, although one of the major challenges will be to deliver therapeutic doses of antioxidants to the lens, which doesn't have a bloodstream.

"A lot of our work has been trying to understand the best ways to deliver an antioxidant to the lens," says Julie. "It's not as simple as taking an oral antioxidant supplement and hoping that your cataract will be prevented."

Julie is also researching why more than 80 percent of patients develop a cataract after having a vitrectomy – a surgical procedure undertaken to treat various conditions affecting the retina. By using state-of-the-art, non-invasive MRI imaging to monitor changes in oxygen levels, she hopes to protect the lens from cataract.

"We're working closely with our colleagues in the Department of Ophthalmology to design particles that contain antioxidants that lower oxygen levels in the eye and protect the lens from cataract after vitrectomy."

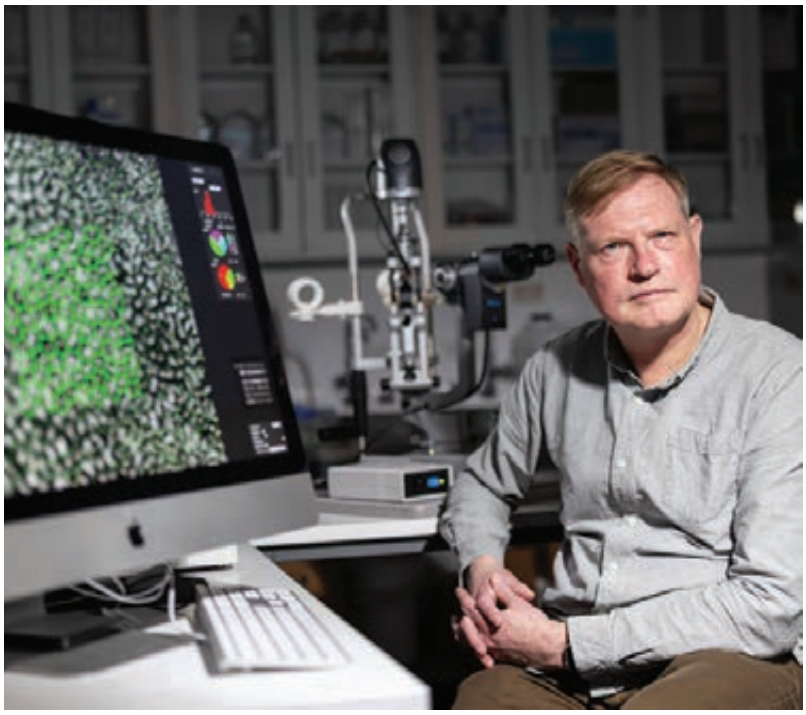
And while solutions have yet to be devised, says Paul, it could involve controlling water circulation in the eye to deliver a combination therapy of antioxidants to the right targets.

"If we can delay the onset of cataract by

(Above) Associate Professor Gus Grey, Professor Paul Donaldson and Associate Professor Julie Lim of the Molecular Vision Research Cluster, whose work includes groundbreaking cataract research. Photo: Chris Loufte

(Right) Corneal transplant recipient Esmeralda Lo Tam is now a doctoral candidate in ophthalmology.

(Below) Nigel Brookes, of the New Zealand National Eye Bank, has developed software to help assess the suitability of corneas for transplant. Photo: Chris Loufte



five to ten years, we'll halve the incidence of cataract," he says, "and that reduction would mean a huge saving in time and resources."

THE GIFT OF SIGHT

Much of the human tissue used for advanced research is provided by the New Zealand National Eye Bank, located within the Department of Ophthalmology.

Established in 1991, the non-profit organisation is dedicated to the prevention of blindness through the provision of donated corneas. These have given more than 8,000 grateful New Zealanders a last chance to save their sight.

"There's a transplant pretty much every day of the week around the country," says Nigel Brookes, the eye bank's technical specialist who has overseen the process since its inception.

In addition to analysing data on what's been transplanted and why, Nigel also conducts clinical research and has developed a software programme to identify the endothelial cell density of corneas to determine their suitability for transplant.

"We have images of the endothelium before they get transplanted and we're comparing them to ones that have been transplanted, and we can see the density decreases massively after transplant," he says.

One of the biggest challenges is a shortage of donors to satisfy a waiting list for around 500 corneal transplants. About 40 percent of ▶

FROM PATIENT TO PHD

Esmeralda Lo Tam was living in Sāmoa when one day she got a sore eye. She rubbed it, rinsed it with water but it only felt worse.

The next day she woke up only able to distinguish light and dark. She arrived at the hospital to be told its sole ophthalmologist was away and would be back in a week.

"At this stage," recalls the University of Auckland ophthalmology PhD candidate, "the pain was excruciating."

With all her family back in New Zealand, where she was born and raised, she made the call to catch a midnight flight out and was seen at the Eye Institute in Manukau first thing the next morning.

Staff diagnosed severe keratoconus – a condition where the cornea thins, bulges and distorts – requiring immediate hospitalisation. "They said if I'd waited one day longer in Sāmoa, I would have lost my eye completely."

A long period of treatment – ultimately a corneal transplant followed by two rejection scares – and recovery followed. There were long hospital stays, and persistent double vision meant she was reliant on others. She tears up recalling the moment her vision was restored: "I remember it vividly. The two pictures I'd been seeing were suddenly one."

Despite having a masters in public health when diagnosed, Esmeralda had never heard of keratoconus. One day during her treatment, she asked ophthalmologist Professor Charles McGhee why she'd developed the condition, which affects one in 2,000 New Zealanders, but appears to be more common and severe in Māori and among Pacific peoples.

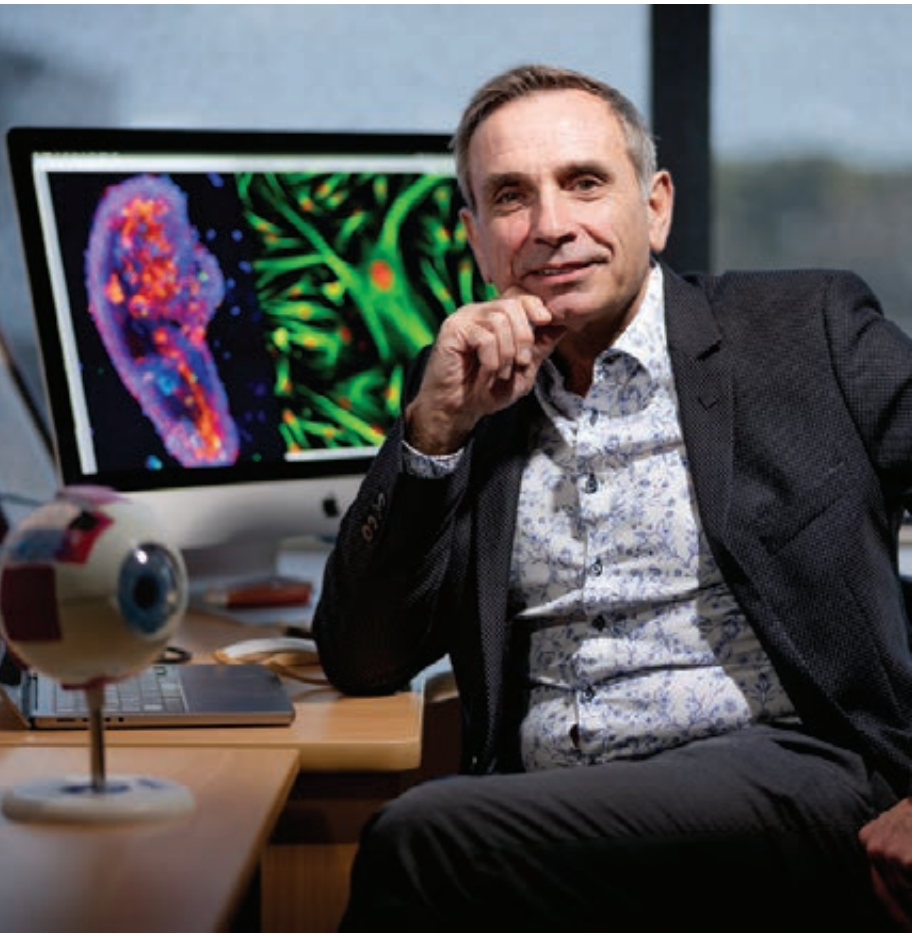
"He said, 'Actually, a lot of Māori and Pacific people have this condition, and we don't have any Pacific researchers in this area to be able to understand it on a deeper cultural level'.

"So I said, 'Can I do it?'"

Charles accepted her offer, and she's now undertaking her PhD looking at the prevalence of eye diseases in Pacific communities. She's part of a team screening the vision and eye health of 1,000 young people across 16 Auckland high schools with high levels of Pacific students, with screening of 2,000 Pacific people in the community to follow.

Raised embedded in her Sāmoan language and culture, Esmeralda hopes insights from the research will help catch eye health and vision conditions earlier among Pacific people, avoiding the complex and expensive treatment she underwent.

"I couldn't imagine I would be studying in public health, but also able to do a little clinical work," she says of her PhD. "That's all thanks to Charles and his team, supporting me on that journey, out in our Pacific communities."



Regenerating tissues using stem cells is one avenue Professor Trevor Sherwin's team is exploring to restore eye function.
Photo: Chris Loufte

"The ultimate satisfaction would be to see our eye drop go into the clinic and restore people's lives."

– Professor Trevor Sherwin, Department of Ophthalmology

the tissue currently being used has come from Australia, and some is also being imported from the US, although "we're aiming hard to get self-sufficiency again," says Nigel.

To that end, a new initiative will be starting at Auckland City Hospital to source eye donations from areas outside of ICU and also to educate staff, patients and families about the process. "Everyone knows about heart transplants and kidneys, but eyes are not talked about very much."

He's also "deeply confused" about the donor process attached to drivers' licences, because next of kin can ultimately veto any donations, and he supports having a registry to clarify donor intentions.

Eye bank coordinator Marisa Thi, who spent her early career conducting animal research, says that it's "incredibly rewarding" being able to help restore people's sight.

"They've been able to drive again, they've been able to go back to work, and just enjoy doing all the things that they love doing."

THE PROMISE OF STEM CELLS

Just a few steps down the corridor at the department, Professor of Ophthalmology Trevor Sherwin's team of PhD students and dedicated lab technicians are forever grateful for the donation of tissue to advance their cornea and stem cell research.

"None of this work could happen without those families making the brave decision to donate their loved one's tissues," says Trevor.

Using cells from umbilical tissue, his team are looking to regenerate a range of corneal cells to trial in donated cornea. "What we're trying to do is regenerate the tissues and restore the function again, and that's the promise of stem cells."

Funded by the Auckland Medical Research Foundation, the Save Sight Society and the Freemasons Foundation, the research aims to inject stem cells into the cornea, says Trevor, "so that we can recreate the cornea in the patient rather than recreating in a dish and then transplanting it".

Bioengineering new hybrid material that mimics eye tissue is another area of research; in collaboration with the Faculty of Engineering, PhD candidate Dr Judith Glasson has been extracting crystalline proteins from fish eyes to create corneal implants.

"What we're trying to do is make implants that are a really good substitute and can be used at much earlier stages, and much more widely than the current tissues," says Trevor.

Cell reprogramming is yet another research strand, and a start-up company called TheiaNova has been formed on the back of this. It's developing world-first eye drops to 'turn back the clock' and regenerate collagen matrix molecules in people suffering from keratoconus.

"We believe that if we put a contact lens on the cornea while that molecule is being made, then we can reshape the cornea back to being functional."

Trevor has published more than 100 papers and received more than 6,000 citations, however he says that working with the University's best and brightest young people provides day-to-day satisfaction. "And the ultimate satisfaction," he says, "would be to see our eye drop go into the clinic and restore people's lives."

EYE DROPS INSTEAD OF READING GLASSES

When Dr Alyssa Lie isn't lecturing at the School of Optometry and Vision Science, or treating glaucoma patients in a private practice, she's continuing her quest to discover why people develop presbyopia – or farsightedness – and how eye drops could correct it.

"It's an age-old problem," she says, "but we've not really cracked the code on why it develops or how to reverse it. We just know how to fix the problem and to make the vision clear again."

Fixing presbyopia has traditionally involved the use of glasses or contact lenses. However, Alyssa says the launch of Vuity (trademarked) eye drops in 2021 provided the "biggest breakthrough in a century" – and an opportunity to advance her research.

Despite the eye drops being FDA approved for prescription-only use to treat presbyopia, there's "limited evidence", she says, about how they work – other than making the pupil shrink to increase the depth of focus. "It is an optical trick to make you feel like the book you were reading isn't very blurry anymore."

Using MRI scans to observe what effect the eyedrops had on the front part of the eye, Alyssa's initial clinical trial revealed that the eye drops changed the way water is being distributed inside the lens. "That's very exciting, because how water is distributed in the lens tissue actually determines the optical power of the lens."

She is now recruiting volunteers experiencing presbyopia for another clinical trial to test the effect of the eye drops on light-sensitive tissues at back of the eye, like the retina, where any changes could have a profound effect on vision.

The total global costs associated with uncorrected presbyopia have been estimated at US$30.8 billion. Alyssa says the aim would be to create a new drug that could manipulate water distribution in the eye without current drawbacks, such as reduced night vision.

While her previous research was funded by donors including the University of Auckland Research Development Fund, the Maurice and Phyllis Paykel Trust and the US National Institutes of Health, her latest trial is supported by the Freemasons Foundation and the highly influential US Association for Research in Vision and Ophthalmology.

"That is a really big recognition that this is very much a question that needs to be answered," says Alyssa. ■

Alyssa Lie is trying to understand how eye drops that fix farsightedness actually work.
Photo: Chris Loufte

"It's an age-old problem, but we've not really cracked the code on why it develops or how to reverse it."

– Dr Alyssa Lie, School of Optometry and Vision Science

Guest columnist

Charlotte Grimshaw

HUMAN STORIES ARE THE SALVATION

In 2025, I was elected president of honour of the New Zealand Society of Authors. This was very nice, but the role came with a significant obligation. I was required to give the Janet Frame Memorial Lecture, which has the aim of delivering an overview of the state of the nation for New Zealand literature. It didn't seem too onerous a task until I realised my lecture would have to acknowledge the existence of AI.

Up until that point, I'd been dealing efficiently with AI: by ignoring it. I scrolled past news articles, refused to engage at all. It seemed too depressing, the prospect that soulless machines could threaten human creativity.

In March, I discovered that my books are among titles that have been used in LibGen, an illegal pirate site AI companies have been using for machine learning. I joined other writers protesting to Meta, and heeded the New Zealand Society of Authors advice, which includes joining an international class action lawsuit to protect copyright, adding a No AI Training notice on the copyright pages of books, and certifying that my books were written by a human.

Forced to face the problem, I buckled down and asked an experienced UK publisher for his take. His response was that, like me, he finds the subject "a horror show", involving loss of copyright and jobs, not to mention the vast amount of energy required for AI generation. He also said, "It's not all it's cracked up to be."

So far, AI makes stuff up (we've all noticed AI summaries that are surreally wrong), it's nowhere near as useful as a human, it's unaccountable and is a curse for artists. There is huge anxiety around copyright, and an awareness that the rapacious entities pushing the technology are not socially responsible, ethical or concerned about our planet's finite resources.

In May, 400 British artists wrote to their prime minister urging him to protect copyright. As they put it, "We will lose an immense growth opportunity if we give our work away at the behest of a handful of powerful overseas tech companies, and with it our future income, the UK's position as a creative powerhouse, and any hope that the technology of daily life will embody the values and laws of the United Kingdom." Artists all over the world are now raising the same concerns.

The New Zealand government's approach to AI is supposedly "light-touch, proportionate and risk-based". It doesn't exactly inspire confidence.

The UK publisher directed me to *The AI Con*, by Emily Bender and Alex Hanna. This book notes that "AI is a marketing term. It doesn't refer to a coherent set of technologies." The authors concede numerous good uses for AI, in medicine and engineering for example, but note that as far as creativity goes, AI is simply a giant mechanism for plagiarism, with (of course) no human impulse or intent behind it.

Faced with the threat to journalism meanwhile, US news website *Axios* is promoting the idea of Super Journalists: "reporters with sourcing, expertise, nuance and connections no machine can possibly match". Experienced humans, in other words.

It's a typically ironic human situation: we're up against the latest self-made nightmare knocking at our door.

My last book was a memoir, *The Mirror Book*, and I've spent years dealing with the fallout from it. This was another ironic human situation: I told a true story, and received a family reaction that was idiosyncratic, psychologically complex and, at one point this year, devastatingly revelatory. A machine could not experience nor reproduce these subtle, unfolding interactions among individual humans.

Writing fiction, the search for authenticity has always required accurate observation. The ideal method is to write about what is, not what ought to be, to hold up the realist's mirror to life, not the moralist's lamp. Writing memoir, the search for genuineness involves writing what was, not what people want the record to be. Authenticity requires the realist's mirror, not the narcissist's celebratory spotlight.

In my new novel, *The Black Monk,* to be published next year, I wrote this: "She had begun to believe that authenticity is the revolution. Against inauthenticity – bad art, propaganda, AI, family gaslighting – human stories are the salvation. Telling your story is fundamental. Call it free speech. It can save your life. It can bring down the palace walls."

It's a typically ironic human situation: we're up against the latest self-made nightmare knocking at our door.

This article reflects the opinion of the author and is not necessarily that of Waipapa Taumata Rau, University of Auckland.

Author photo: Jane Ussher

One of New Zealand's most celebrated writers, Charlotte Grimshaw is the author of critically acclaimed novels, story collections and a bestselling memoir. Also an award-winning reviewer and columnist, she holds Law and Arts degrees from the University of Auckland.

STRONGER TOGETHER

Personal experiences are driving two women's work to shine a light on lymphoedema. By Caitlin Sykes

A chance conversation in April first connected Catherine Davies and Dr Hayley Reynolds. But the pair are now firmly bonded in their mission to make a difference for sufferers of an incurable condition.

Lymphoedema causes swelling due to a buildup of lymphatic fluid when the lymphatic system is blocked, or damaged through the likes of cancer treatment. It requires lifelong management and can cause painful and permanently swollen limbs and increase the risk of serious and recurrent infections.

It particularly affects breast cancer survivors; after enduring often gruelling cancer treatment, up to 40 percent of these women will subsequently develop lymphoedema.

Among them is Catherine, a development manager whose work involves raising philanthropic funding for the University's Auckland Bioengineering Institute (ABI) and the Liggins Institute.

She's worked at the University for 12 years but had been in her current role for only three weeks when she was diagnosed with breast cancer in March 2024. She largely worked from home during extensive treatment that included surgery, chemotherapy, radiotherapy and immunotherapy. She had good results from her cancer treatment but developed symptoms of lymphoedema around the time she returned to the office in February this year.

"It's one of these conditions, unfortunately, where there is no cure," says Catherine. "I will be dealing with it for the rest of my life, and I've moved from active cancer treatment straight into active management of lymphoedema."

When Catherine was talking to a colleague about starting lymphoedema treatment, the workmate mentioned that Hayley, an ABI senior research fellow, was investigating the condition. Catherine and Hayley have since collaborated on media interviews about lymphoedema.

"I am very open with my story," says Catherine, who wants to increase philanthropic support for lymphoedema research, "and Hayley is a genius, so if there's anything I can do to help encourage other people to support her work, obviously that's my job, but it's now also a passion."

(L-R) Dr Hayley Reynolds and Catherine Davies
Photo: Chris Loufte

Hayley leads ABI's cancer imaging research group and says investigating lymphoedema was a natural progression. ABI specialises in modelling the body's systems, and in a Marsden-funded project, Hayley and her team are developing computational models of the lymphatic system, specifically focused on people undergoing cancer treatment.

"We're trying to understand why and how lymphoedema develops in some people, but not others," says Hayley. "We're wanting to develop a multi-scale model that we can feed clinical data into and simulate the impacts on the lymphatic system of some of the key treatments that someone might receive for cancer."

The goal is to use this information to further personalise cancer treatments, she says, so that lymphoedema doesn't develop in the first place.

Hayley and her team are cooperating with researchers from Harvard Medical School and the Australian Lymphoedema Education, Research and Treatment Centre (ALERT) at Macquarie University. The New Zealand researchers recently gained Catalyst Fund seed funding to bring US and Australian researchers to New Zealand for a five-day workshop early next year; and the University of Auckland team and ALERT's Associate Professor Hiroo Suami will subsequently travel to the US to learn more about the US team's clinical work and collaborate to develop more advanced lymphatic technologies.

Learning about Catherine's experience brings home the importance of the work, says Hayley, who has long been personally driven to create better outcomes for cancer sufferers. Twenty years ago, her brother died from leukaemia after complications arising from a severe infection that compromised his treatment regime.

"That's instilled in me this real desire to try to make things better for people with cancer," she says. "It's terrible what cancer patients go through, and I find it awful that you can get through that and then still end up with a debilitating condition. So, if we can eliminate or reduce those side effects, that's a good thing."

"We're trying to understand why and how lymphoedema develops in some people, but not others."

– Dr Hayley Reynolds

(Left) Toa Fraser, pictured at the Parkinson's Pacific Awareness Day with wife Ngaire Fuata.

POWERFUL PARKINSON'S MESSAGE

Distinguished Alumnus says silence about the disease can be an enemy

There were few dry eyes in the room when playwright and film director Toa Fraser shared his difficult and moving story about living with Parkinson's at the inaugural Parkinson's Pacific Awareness Day.

The July event was held in Māngere and was organised by University of Auckland honorary research fellow Dr Christina Buchanan, the Pacific Parkinson's Support Group and Parkinson's New Zealand. It brought together people with Parkinson's, caregivers, family members, clinicians and academics.

A Distinguished Alumnus, Toa was diagnosed a decade ago with the disease, keeping it secret for five years, until the extent of his symptoms meant he could no longer stay silent. The co-executive producer and director of *Sweet Tooth* and *Murderbot* considered retirement at the age of 45.

"I've come to view my Parkinson's not as a living death, but actually as a blessing, a gateway to my authentic life," Toa said during his address at the event. "It's possible to live a fulfilling, fruitful and useful life with Parkinson's – with professional support and with love."

The event aimed to break down stigma and honour the resilience of Pacific families living with Parkinson's disease. Parkinson's affects more than 10 million people worldwide and poses unique challenges for Pacific communities, including cultural stigma and late diagnoses, said Toa.

"Parkinson's is often seen as an old Palagi disease, which inhibits us from pursuing treatment. Silence can become our enemy."

Full story: auckland.ac.nz/pacific-parkinsons-day

VAPING AND LUNG HEALTH

What are the impacts of New Zealand's high vaping rates?

A new research project led by Associate Professor Kelly Burrowes at the Auckland Bioengineering Institute aims to predict the long-term impact of vaping on lung function.

In 2018, nicotine-containing e-cigarettes were legalised in New Zealand. Since then, vaping uptake has steadily increased, particularly among young people.

"New Zealand has some of the highest vaping rates in the world," says Kelly. "When it first came in, there were no rules. People were allowed to market and advertise it. That's how it became so quickly established."

While vaping is believed to be less harmful than smoking due to a lack of tobacco and associated toxins, there is no information indicating it is safe.

"Vaping has less dangerous chemicals than smoking, but it does still have known dangerous chemicals," explains Kelly.

Associate Professor Kelly Burrowes is leading a project to look at the long-term impact of vaping. Photo: Chris Loufte

"It also has different chemicals to smoking, like flavouring chemicals. These are the same as the flavouring chemicals used in food typically, but it is not known how safe it is to breathe these in."

Kelly has an extensive background in smoking-related lung disease research and says an aim of the project is to uncover any potential harm from vaping to help inform future regulation.

"We don't know how bad it is for people yet. Someone might start smoking in their teens, but they won't actually get lung disease until their fifties. Until there are clear links to disease, it's easy for people to ignore."

Full story: auckland.ac.nz/vaping-lung-health

SQUASHED BUGS AND CLIMATE DATA

Insects hit by cars will contribute to climate change research

New research led by University of Auckland scientists will involve asking thousands of members of the public to clean insect material off their number plates.

This will provide insect DNA samples that can be used to map insect populations in different environments across New Zealand. The samples will provide the basis for AI applications that can identify patterns, predict future insect distribution and track how climate change affects these tiny, but ecologically significant, creatures.

Dr Richard O'Rorke and Dr Aimee van der Reis are leading a team of researchers from the School of Computational Science, Centre of Machine Learning for Social Good, School of Biological Sciences, and Ngā Ara Whetū – Centre for Climate, Biodiversity and Society.

The US-based Climate Change AI Innovation Grants programme has given US$150,000 for the research project.

Dr Richard O'Rorke collecting insect DNA from a number plate in a pilot project last year with members of the Auckland Veteran and Vintage Car Club.
Photo: Aimee van der Reis

Insect studies often rely on trapping that provides excellent data for a small area, but we lack knowledge about where thousands of insect species occur across vast areas of New Zealand.

"We lack a rough consensus on the number of insect species," explains Aimee. "To try to fill some of the knowledge gaps, we need new methods to sample insect life over broad swathes of landscape."

Volunteers are now being provided with DNA-sampling kits to contribute to the project.

Full story: auckland.ac.nz/climate-bugs

AI TOOL FOR TE REO MĀORI

Project set to transform how te reo Māori is spoken and learned

A $1 million research grant is supporting a three-year initiative to develop an AI-powered coaching tool to help learners improve their pronunciation of te reo Māori, and offer personalised feedback in real time.

The project, funded by the Ministry of Business, Innovation and Employment's Smart Ideas, is co-led by Māori-medium educator and researcher Dr Piata Allen (Ngāti Kahungunu, Ngāti Hinemanu, Ngā Wairiki Ngāti Apa) from the Faculty of Arts and Education and Dr Jesin James (Engineering and Design), who works in speech signal processing and machine learning. It brings together a multidisciplinary team of Māori language experts, linguists, engineers and computer scientists.

"This tool has the potential to be transformative for our reo and for education in Aotearoa," says Piata.

Associate Professor Peter Keegan, Professor Catherine Watson, Dr Piata Allen and Dr Jesin James are part of the team developing a new AI-powered te reo Māori tool.
Photo: William Chea

"It will help people develop muscle memory for pronunciation and supports everyone who works with Māori names and communities to speak confidently."

Grounded in tikanga Māori, the tool could integrate with existing apps and be accessible to teachers, students, public servants, and anyone engaging with Māori communities.

Piata says pronunciation remains one of the biggest barriers for beginners.

"Even among those who are trying, many are not confident with pronunciation. We want to change that. This tool will support accurate pronunciation in a way that's empowering and supportive."

Full story: auckland.ac.nz/ai-te-reo-tool

Alumni profile

SPIRIT GUIDE

Working with some of the gin world's biggest brands straight out of University launched Marcel Thompson into a career steeped in the spirit. By James Fyfe

While the fundamentals of making gin have been the same for hundreds of years, Marcel Thompson has seen big changes in the industry during his career.

In the late 1980s, fresh out of the University of Auckland, Marcel Thompson was faced with an intriguing choice of career paths: pharmaceuticals, explosives or gin.

"I was fortunate enough to land three job offers at the same time," recalls Marcel. "The first two sounded very responsible in matters of life and death, and the third sounded like a lot more fun."

And so, armed with his Bachelor of Science, with a major in chemistry, he began working as an assistant distiller at United Distillers NZ. Thrown in at the deep end from day one, Marcel began learning the trade, working with such renowned brands as Tanqueray, Gordon's, Booth's and Boord's.

"All these years later, I realise just how blessed and fortunate I was to have a role in a gin distillery that was producing some of the biggest brands on the planet," he says. "At an early stage I also got a very intense exposure to the business process from start to finish, producing a fast-moving consumer good. I learnt a great deal about the importance of teamwork, good communication and what good leadership looks like. And for that I am forever grateful."

Describing gin making as a "highly sensory experience", Marcel relished the challenge of learning to balance the intuitive nature of identifying the taste of a great gin with the analytical side of getting the chemistry just right to achieve that desired taste.

"Putting numbers against a feeling – which really does understate the skill my mentors had – was pretty satisfying," he says.

Although born and raised in Auckland, Marcel (Ngāti Whātua, Waikato, Ngāti Koata) has spent a sizeable chunk of his career working overseas, mainly in Australia, where he moved in the early 1990s, as well as in Fiji and Papua New Guinea. He has also spent time working

as a manufacturing consultant over the course of his career, but, as he is quick to point out, "I always had my hand on the tiller in the spirits industry".

And while the fundamentals of gin making may have remained the same for hundreds of years, the industry itself has changed drastically since Marcel's time as an assistant distiller in the 1980s. Once dominated by just the large, legacy brands, recent years have seen an explosion of boutique distilleries.

"When I first entered the industry in 1987, it was very closed," he says. "There was a real sense of confidentiality around it – and the reason being is that if you're entrusted with brands like Tanqueray, which was created in 1830, and Gordon's, in the 1760s, there is a real sense of ownership and guardianship to go with that heritage."

All that changed in 2008, however, when UK laws around gin making were amended. Previously, gin could be legally produced only in stills with a minimum capacity of 1,800 litres. But the new legislation made it much easier for smaller distilleries to meet the necessary licensing requirements to make gin. This opened the door for small-batch distillers to enter the game – led largely by the London-based distillery Sipsmith – and paved the way for a subsequent boom in craft gin production.

Marcel says while the change has led to a more crowded market, today's gin-making scene is characterised by a greater sense of camaraderie and openness.

"The product now needs to stand out in a more competitive marketplace, but there's a lot more transparency and support around the industry," he says. "It's this whole notion where a rising tide raises all boats."

And that ethos of sharing knowledge and helping others is a major part of Marcel's raison d'être. Working with businesses like Poor Toms, which he helped establish in Sydney in 2014, Marcel played a key role in the craft distilling movement in Australia. And in 2018, he founded Still Magic, a spirits business dedicated to partnering with those keen to learn the ins and outs of making and selling gin commercially.

Marcel has also written two best-selling books: *Still Magic*, "to show people that making great gin is accessible", and *Gin Ventures*, "to demonstrate that everyday people can produce fantastic spirits businesses". He admits to taking a shine to the writing process over the years and has another book up his sleeve, focusing on how to grow a gin business.

Last year, in a career highlight, his commitment to the industry was acknowledged when he became the first New Zealander to be installed as a lifetime member to the prestigious Gin Guild in the UK.

"The product now needs to stand out in a more competitive marketplace, but there's a lot more transparency and support around the industry."

– Marcel Thompson

"It was a really remarkable sense of achievement and a moment I'll treasure for quite some time," says Marcel, who wore a kākahu made by his cousin Dale King especially for the occasion, honouring his Māori heritage. "In terms of education and promoting spirits for consumption and marketing, to have membership with such an illustrious group is highly satisfying."

Now, Marcel has a new project on the go in the Waikato, where he lives with his wife, Mary.

The Te Aroha Distilling Co, slated to open later this year, will be a "spirits centre of excellence" that will function as both a gin distillery and an education hub. The plan is to teach everything from the sensory aspects of gin to how to plan, launch and run a spirits business. And, of course, students will also learn the practical skills needed to distil great gin. The centre takes its name from both the town in which it is located and the beautiful Mount Te Aroha, in whose shadow it sits.

"My mentors have often said that the four things you need for great gin are great people, great ingredients, great equipment and love. So, what better place to put a distillery than at the foot of the mountain of love."

Last year, Marcel became the first New Zealander to become a lifetime member of the Gin Guild in the UK.

Feature

The brain, the body and the power of art

How does science explain moments when we are captivated by the arts? Janet McAllister goes in search of new research that explores the ways in which to be human is to need the arts.

Once upon a time in Tāmaki Makaurau Auckland, Dr Ying Wang gathered kawakawa leaves from her garden and dipped them in Chinese ink to make prints on fabric. The smell and feel of foliage native to her adopted home intertwined with the smell of the ink of her ancestors and her childhood land. Ying then literally bound part of herself into the work by embroidering strands of her hair into the pattern of leaves. It was a moment of connection, of combination, of weaving her identity: of being her full self, of being Chinese in Aotearoa New Zealand.

"I've been here for more than two decades, but the sense of belonging sometimes is still quite shaky," explains Ying, an arts therapist turned research fellow at the Centre for Arts and Social Transformation (CAST). "But in that moment of making art, I felt the peace of strongly bonding myself to this land and my distant birthland … So every time I look at that painting, it reminds me of that moment."

Whether we're making or simply appreciating art, such moments demonstrate its power to move us in mind – and also in body.

Take the experience of Professor of Art History Ngarino Ellis (Ngāpuhi, Ngāti Porou). Co-author of *Toi Te Mana*, the first comprehensive history of Māori art, Ngarino describes how she is sometimes "completely overwhelmed" by an artwork. Or CAST director Professor Peter O'Connor, who is clear that the arts – particularly music – are "the first place we go to when crisis and disaster hit in our lives". Or Ying, who sees "something happening magically" for people in arts therapy – a magic she is keen for us to understand systematically and scientifically, to guide future arts therapy.

It's one of the reasons Ying was excited to join Professor of Psychology Paul Corballis and Professor of Art History Gregory Minissale as co-supervisor for psychology doctoral student Tamar Torrance, who is researching how our brain communicates with itself when we're captivated by a work of visual art.

Response to any art is a complex phenomenon. It involves the 'aesthetic triad' of our senses, emotions and cognition (understanding) all interacting with each other. But neuroaesthetics – the field of neuroscience investigating what happens in the brain when we respond to the arts – has often looked at only one prong of this triad network, and/or only one part of the brain, and then tried to build a picture of everything that is happening with these composite puzzle pieces.

Gregory is not a fan of such "crude, reductionist methodologies". "Art is so complex that some of the pieces just don't add up," he says. "What has been left out of the picture is emotion and tactility – the fact that human beings are not just parts of brains." So Tamar has designed her research to consider activity across the brain and body, and to relate it to sensory, emotional and intellectual responses. It's what Gregory calls a "whole all-round, three-dimensional embodied, complex approach".

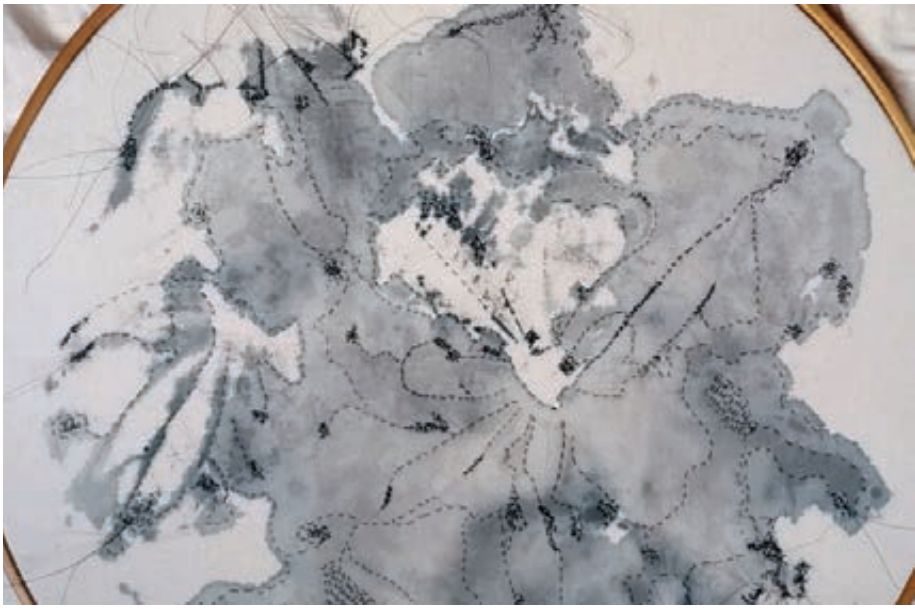
YOUR BRAIN, AND BODY, ON ART

Tamar is comparing the brainwaves of her research participants when they're responding strongly to an artwork, with their brainwaves when they're in front of an artwork that leaves them cold. The difference will show what happens – which parts of the brain communicate with each other – when the viewer has a 'heightened aesthetic experience'. It doesn't matter what the artworks are, and it doesn't even matter if the viewer feels ecstatic, angry or sad – as long as they feel strongly about one artwork and unthrilled about another.

The most fun part of Tamar's suite of experiments takes place in Auckland Art Gallery Toi o Tāmaki, before opening hours, in the corridor exhibition *Gothic Returns: From Fuseli to Fomison*. Tamar chose the exhibition because it includes a wide variety of (Western) artistic styles, so each viewer is likely to respond strongly to some artworks and not others; and because responses to the Gothic may include fear and horror. Unlike a lot of neuroaesthetics research, this project is not particularly interested in beauty (so 19th century), nor in the stress-reduction effect of certain types of art. ▶

Left: Tamar Torrance with one of her experiment setups, at Auckland Art Gallery Toi o Tāmaki. Photo: Chris Loufte

Below: Detail of Dr Ying Wang's artwork.



"In that moment of making art, I felt the peace of really strongly bonding myself to this land and my distant birthland."

– Dr Ying Wang, Centre for Arts and Social Transformation

"The arts are a human right. You can't really be fully yourself if you've cut yourself off from the arts."

– Professor Peter O'Connor, Centre for Arts and Social Transformation

A country that loses the arts loses itself, says Professor Peter O'Connor.
Photo: Chris Loufte

Part of Tamar's experiment is comparing responses to artworks in the gallery to responses to the same artworks on a computer screen, and in virtual reality seen via a VR headset. Gallery staff have their own hypothesis: "We feel there's something special about coming to the gallery," says exhibition curator Sophie Matthiesson.

So here you are, sitting on an office chair that Tamar has adjusted until you're at eye-level with a 1971 Tony Fomison painting of a man's square, bald head – much larger than your own. Half the man's face is missing; in its place is a skeletal sneer and an empty eye socket. Your communion with 'Skull Face' will last 60 seconds, before Tamar politely commands "gaze down".

Then there are clipboard questions: How moved did you feel? (Repulsion is valid.) Did you experience a physical reaction? (Perhaps shivers down the spine.) How much did you relate it to other works of art? (Maybe you thought of other half-skull *memento mori*, or Marlon Brando as the sinister Kurtz in *Apocalypse Now*.) How important were the colours to you? How much did you lose track of time or get lost in thought? The questions are designed to detect how much the artwork changed your emotions, perceptions and understandings, and how much you were in a state of 'flow' or concentration.

So that the exertion of standing and walking does not mess up Tamar's data, she wheels you to the next artwork – like an indulged patient or eccentric royalty. You stay sitting on your throne while looking at a total of 22 artworks. In your pocket is a portable electrocardiogram (ECG), recording your heartbeat.

Your crown – and this is the coolest, nerdiest bit – is an electroencephalogram or EEG cap studded with 64 electrodes detecting your brain's electrical activity. The skull cap is hooked up to a bioelectrical signal amplifier used to turn up the volume on your faint brainwaves. That novel piece of kit sits on your chest and, like the ECG heartbeat recorder, it is connected to its own laptop sitting on a trolley. Tamar has another researcher helping her wrangle this whole rolling circus.

Later in the lab, Tamar uses the heartbeat information and questionnaires to identify the viewer's highest and lowest responses. She then performs complex maths to work out which parts of the brain were responsible for which electrical impulses (the calculations are required as each signal "has to pass through a bunch of different tissues in the brain, so it's very distorted by the time it reaches the sensors"). The methodology she's using for this network neuroscience analysis is so technical and tricky that it is rarely used in neuroaesthetics.

Then she can finally compare the difference in brain excitement in response to the most stimulating artwork versus the least. She projects the EEG data into a structural model of the brain (a magnetic resonance imaging or MRI template) and voila! A map of the power of art on the human brain.

Tamar's broad hypothesis is that the enrapturing art experience will involve far more "highly complex, intra-brain interactions" than the 'meh' experience. Neurons firing in excitement with each other – due to experiences that are "novel, impactful, meaningful, outside of the norm" – help increase our neuroplasticity. In other words, intense art experiences may help strengthen our brain's ability to adapt and reorganise itself, to learn new information, and even to heal from injuries.

Meanwhile, pictures of brain excitement will be further evidence for the power of art. As someone who has studied art history, worked in galleries and enjoys the visual art world, Tamar is concerned about what she sees as a general "shift away from taking the arts seriously, toward seeing the arts as something that's frivolous and self-indulgent and a bit wanky". She hopes her research will help support the idea that art is powerful and art is for everyone.

ARTS AS IMPERATIVE

That idea is a cornerstone for CAST. "The arts are a human right," says Peter. "You can't really be fully yourself if you've cut yourself off from the arts."

Peter says that, contrary to prevailing ideology, kids in 'arts-rich' schools do better at literacy and numeracy.

"It's really difficult in schools for children and teachers to be fully human if the arts aren't there," says Peter.

CAST's Te Rito Toi website is full of artistic educational resources for children who are coming back to learning after having been affected by trauma; the best way back, says Peter, is through the arts.

He would know: he has led interactive theatre workshops in trauma zones, from post-earthquake Christchurch to Hawaii after the 2023 fires left large numbers of families homeless. He also led a team that created an arts-based resource about mental health that's being used for 12,000 students in more than 300 schools around the country.

This isn't arts as nice-to-have; this is arts as imperative: "a country that loses the arts loses itself", says Peter.

Other researchers are also concerned the arts aren't valued enough. Ying points out that despite its power, arts therapy is often treated as a "marginalised helping profession". Professor of Health Psychology Elizabeth Broadbent observes that research about the potential benefits of art in health settings is "sort of a fringe area – it's not like you're testing a new drug" and that funding can be hard to obtain.

Several years ago, Elizabeth and Gregory teamed up with others (including then PhD student Mikaela Law) for a small study that found landscape artworks were more stimulating and reduced drowsiness after stress when compared with viewing scrambled images of the same artworks. Elizabeth and Mikaela (now Dr Law) later published a scoping review of studies looking at the effect of art on stress.

They found several studies did suggest certain types of art may be beneficial in certain circumstances – and they suggested viewer choice may also be important. But they also found the research area lacks large randomised controlled trials to pinpoint the effect and its size.

"A trial in a dentist setting would be quite nice," says Elizabeth. "Half an hour in the chair, vary what's on the ceiling, you could monitor heart rate and blood pressure, they're all stuck there and not moving [which removes some confounding factors]."

To recover from disaster, crisis or trauma, "fun's not enough", says Peter. Watching a comedy movie is not a substitute for arts therapy – which, like any therapy, is sometimes uncomfortable. Ying has worked with low-income women scared to make a mark on expensive paper – they do not think they are worth those resources. Ying encourages them to overcome their concerns and increase their self-worth using the paper.

Some people have trouble letting go of their fear of making a mistake: the unpredictability of watercolours can enable them to take risks in a safe space and "see beauty can come from an accident, from leaving space for surprise", says Ying. Self-reflection and emotional regulation can come from this embodied learning.

And for all of us at home, Peter says, evoking Wordsworth: "There's more to life than 'getting and spending', you know. A truly rich life is one that is imbued with the joy and the wonder of making."

Consider also the tikanga Ngarino describes learning from her artist mother, Elizabeth Ellis (Ngāpuhi, Ngāti Porou; 2025 senior New Zealander of the Year): when you start a new practice, "the first thing that you make, you have to give away. And then the second one you can keep ... When you receive someone's first example, it's usually a bit wonky, the colours are a bit off – but they've chosen you to make that connection with, and that's really important."

Ngarino explains that the definitions of art change over time but "art has this really important role within te ao Māori, from my perspective: it is about connection and a sense of belonging, feeling part of a community, whatever that might look like. That's an important component of well-being."

Ying would agree; her kawakawa print work – her reminder of belonging – hangs directly over her desk. ■

Art can provide a sense of community and connection, says Professor Ngarino Ellis. Photo: Chris Loufte

"Art has this really important role within te ao Māori, from my perspective: it is about connection and a sense of belonging."

– Professor Ngarino Ellis, Faculty of Arts and Education

Alumni profile

The DNA detective

Bethany Forsythe's work on techniques to identify human remains from the Vietnam War has the potential to bring closure for families 50 years on.

By Donna Chisholm

Bethany Forsythe is based in The Hague, where she works for the International Commission on Missing Persons. Photo: Chris Loufte

Think 'forensic scientist' and, thanks to hit television shows such as *CSI: Crime Scene Investigation*, most of us will imagine an overalls-clad figure in boots, mask and disposable headgear combing the scene of a bloody murder for clues.

But from her office at The Hague in the Netherlands, University of Auckland-trained forensic scientist Dr Bethany Forsythe is showing not only the variety of the job, but its capacity to bring closure for families many decades after death. At 32, Bethany heads a small team developing sophisticated DNA-testing techniques to enable identification of remains discovered in Vietnam, 50 years after the war there ended in 1975.

Her work with the International Commission on Missing Persons (ICMP), which began with a two-year contract in 2023, has now been extended until the end of 2026. For the past two years, Bethany and her colleagues have been developing next-generation sequencing techniques to analyse nuclear DNA (from both parents – not the more plentiful maternal mitochondrial DNA) from the cells in badly degraded bone samples remaining from the war.

"They've been buried in soil for a really long time, so the degradation has been amplified," says Bethany. "There's a huge amount of microbial contamination in the bones as well because of the heat and moisture. They act like ancient DNA, from bones that are much older than they actually are."

Her team has worked on 38 of the 100 bone samples sent to their lab from Vietnam for the testing to develop the new techniques. These techniques will enable them to sequence and analyse the exact make-up of millions of DNA fragments simultaneously.

"Previously, it was just looking at fragments of DNA and then separating them in a gel, based on size. You were examining the differences in the length of fragments between individuals;

now we're looking at so many more markers and actually what their DNA make-up is. The samples are so challenging that you're pushing the boundaries of the technology."

The techniques have been proven to work. Now, Bethany and her team – working with colleagues based in Vietnam and collaborators at Vietnam's Academy of Science and Technology in Hanoi – are about to begin using them on bones unearthed in Cao Bang, a remote province in northern Vietnam.

When working in a field that can be emotionally harrowing, the possibility of identifying the remains and bringing closure to families from a decades-old conflict is comforting.

"I've adjusted to working in a criminal space and constantly facing horrible cases, but I wasn't quite prepared for what it's like to be constantly reminded of atrocities in the world. Every programme we work with is generally associated with some kind of conflict, disaster or human suffering."

Although the scientists are encouraged to keep up with all the news and information in their field, Bethany has found the mental toll of doing so can be challenging, and she tries to manage that exposure.

Especially since she became pregnant with her first baby, which at the time of writing was due in late October, with her partner Dr Maarten Kruijver. Maarten is also a scientist, a forensic statistician, whom she met while working at the then-ESR, now known as PHF Science (the New Zealand Institute for Public Health and Forensic Science) in Mt Albert. Maarten is from the Netherlands, which made the decision to relocate much easier.

Bethany's path to Europe began with a Bachelor of Biomedical Science at Victoria University of Wellington, majoring in human genetics and molecular pathology.

"I really liked the DNA side of biology."

She had been attracted to a career in forensic science since her high school days, but not because of any *CSI*-type television shows, which she never watched. Her initial interest was piqued by an uncle – a detective who talked to her about some of his cases.

Studying in Auckland was always a part of that goal. "I'd always known even before I started studying at all, that the University of Auckland's forensic postgrad course was the best one to do."

A major part of the attraction to the Auckland programme, she says, was its strong links between academia and industry, particularly the then-ESR. "It's very practically focused."

Bethany began her masters degree in Auckland in 2015, after which she worked in the ESR's criminal laboratories for two years before returning to the University to begin a doctorate. She completed her PhD in 2023, just before heading to The Hague.

"The more I studied, the more I learned how different all of the disciplines within forensics are. I guess that's one of the things you get from the '*CSI* effect' is that it's all quite glamorous. But there are so many areas of expertise and modules of science that are needed for one case. The people who go to the crime scenes are aware of the biology and the DNA, but they're not the experts in DNA. That's the people in the lab doing the analysis."

She had heard about, and been captivated by, the work of the ICMP during a 2018 conference in Perth, where she attended a presentation by a former Red Cross worker on humanitarian forensic science work after disasters.

"It was about how forensics and DNA could be used for that kind of closure. Criminal forensics is a dark field to work in and you're constantly exposed to the worst of crime. When I listened to this man present on his work, I thought, 'that's such a rewarding area'. I just put 'ICMP' in my notebook and circled it. That's when I decided I did want to go back and do a PhD."

"The samples are so challenging that you're pushing the boundaries of the technology."

– Bethany Forsythe

She was only months from presenting her doctoral thesis when Maarten found her current job advertised and she was hired after a couple of 3am Zoom interviews. Although US President Donald Trump has all but closed the US Agency for International Development (USAID), which initially funded the work, Bethany says the US government has committed to supporting the programme for the next 18 months.

For Bethany, bringing resolution and closure to those who have lost loved ones in war and other disasters is a key attraction of her work.

She hopes the advanced techniques being used in Vietnam can contribute to the identification of the missing on a global scale. Motivated by this potential, she says, "I'm committed to exploring how these methods can be applied in ongoing conflicts and other missing persons cases worldwide".

Feature

Four ideas for a smarter energy future

While households struggle with soaring electricity bills and thousands are left without power following storm events, pressure is building to move to more sustainable energy sources and rein in spiralling emissions.

What can be done? Peter Griffin highlights four smart solutions for a more affordable and sustainable energy future.

Professor Emilson Silva says creating more flexible ways for big industrial power consumers to use energy will benefit us all. *Photo: Chris Loufte*

1 INDUSTRY FLEXIBILITY

This past winter, some New Zealand manufacturers sounded the alarm that spiking power prices and insecure energy supply posed a threat to their very existence.

But University of Auckland professors Brent Young and Emilson Silva are building a new playbook that they hope will provide industry with a more secure energy future.

Their work targets New Zealand's growing energy volatility challenge. As the grid adds more renewable (but less predictable) energy sources, like wind and solar, there are also shortfalls in hydropower and gas. They're factors amplifying price spikes and supply risks – those issues flagged as existential threats to some manufacturers.

Their core idea is to run factories more flexibly, so they can store and release energy during production – like a so-called 'virtual dynamic battery'. And those store-or-release choices can be coordinated using a network of digital twins.

"A digital twin is basically a digital model of your plant that is connected to that physical system and is used for decision making," explains Brent, who is director of the Industrial Information and Control Centre (I^2C^2).

He likens the twins' role to simulating 'what-if' scenarios, which then inform when to time-shift energy use in a plant without sacrificing output.

Emilson, who is director of the University's Energy Centre, says the aim is to better coordinate supply and demand among large industry, so it can avoid costly peaks and maintain production.

And a solution that addresses the energy trilemma of security, sustainability and affordability is key.

"If you go for one, you could go very sustainable, but if it's unaffordable and insecure, that's a solution no one wants," says Emilson.

Greater energy flexibility for industry can also benefit everyone, he adds, by lowering economy-wide energy costs and accelerating New Zealand's transition to a low-carbon future.

New Zealand Steel's Glenbrook Steel Mill is the proving ground for what this could look like. It's home to a $300 million electric arc furnace, thanks to a co-investment with the government and an innovative energy supply deal with Contact Energy, which has built-in flexibility to scale down production at times of peak energy demand or supply shortages. It's also expected to cut Glenbrook's emissions by more than 45 percent, or 1 percent of national emissions.

For New Zealand Steel energy manager (and Auckland alumnus) Alan Eyes, the value of flexibility is clear: it can help mitigate demand destruction – when industries cut back because energy is too costly or unreliable. And it can reduce the need to build new infrastructure to deal with rare demand peaks, which drives up everyone's bills.

"Flattening the demand curve is key," says Alan, but adds that the market currently offers few ways to support it. The Contact partnership shows how contracts and control systems can align plant operations with grid needs – provided policy and market settings catch up.

2 REMOTE RESILIENCE

When Cyclone Gabrielle triggered prolonged power outages and communications failures – particularly for remote communities – it exposed the fragility of Tairāwhiti infrastructure.

That's since sparked a collaboration between University researchers from Te Pūnaha Matatini, Te Weu Charitable Trust and local hapū in Tairāwhiti to design microgrids that keep the lights on and communications flowing when future extreme weather events hit.

Led by Faculty of Engineering and Design Associate Professor Michael O'Sullivan, with PhD researcher Zainab Rizvi, it aims to answer a deceptively simple question: where should solar, batteries and control systems be placed, and how should they be coordinated to deliver affordable, resilient power across marae, schools and households?

The goal of the collaboration is a network of microgrids that can operate on-grid during normal times, then off-grid to share power locally during emergencies.

"We're trying to get a win-win-win: more renewable generation, reduced load on existing infrastructure, and improved energy well-being, taking away some of the energy hardship in Tairāwhiti," says Michael.

Crucially, it's a co-designed process anchored in the priorities of whānau and with mana motuhake (autonomy) at the fore.

"Resilience is determined by what capacity you already had before a disaster. If you didn't have much to begin with, which a lot of our whānau don't, then it just takes you backwards," says Te Weu researcher Natasha Koia (Te Whanau a Rakairoa, Te Aitanga a Mate, Te Whanau a Tapuhi).

Post-Gabrielle, 22 marae have been equipped with solar systems, thanks to a coalition of funders. The question now is how to maximise that investment to benefit their communities. This includes supporting off-grid households and reducing energy hardship in a region that pays above-average power bills despite lower incomes.

The team's project began with modelling the national Transpower grid to test a key risk: would shifting a chunk of Tairāwhiti demand to local generation disrupt transmission flows elsewhere? Early results suggest it wouldn't, clearing the way to focus on regional distribution.

The researchers are now building a model of the local lines network, in collaboration with Firstlight Network and the Tairāwhiti Distributed Energy Programme. This maps factors such as where load is drawn and where new solar is being installed. A smart, flexible control layer (employing the likes of sensors, smart meters and scheduling software) will optimise when to charge batteries (including from the grid at off-peak prices) and when to discharge them to support events at marae or meet household needs.

Solar is being used initially, with the community keen on robust, simple systems that are easy to use and maintain.

The researchers' modelling will be followed by pilot programmes focused on marae. These could serve as hubs for communications, refrigeration and cooking during outages, and as exporters of surplus energy to nearby homes when the lines are working.

Researchers are investigating how solar systems installed at marae in Tairāwhiti, such as this one at Rongo-i-te-Kai Marae near Ruatōria, can help power microgrids to increase energy resilience and affordability. *Photo: Nigel Thornicroft*

3 CHANGING CITIES

Cities are complex, layered places that require complex, layered solutions to make them more energy efficient and resilient in a changing climate.

At the University's Future Cities Research Centre, where energy is just one strand of work, research is being undertaken in contexts from households to industrial zones to cityscapes.

"We're interested in the complex connections across all levels of the built environment," says its co-founder and director Professor Paola Boarin. "Optimising energy use, using less of it, and improving resilience requires a genuinely transdisciplinary approach."

One flagship initiative targets urban industrial zones for deep decarbonisation. The project, which has almost $9 million in MBIE Endeavour funding, brings together the Centre; the University's Ngā Ara Whetū: Centre for Climate, Biodiversity and Society; economics consultancy Market Economics; Auckland Council; and major architecture, engineering and construction firms. Focused on industrial areas with large, homogeneous rooftops and predictable energy use, the initiative pairs factory retrofits and green infrastructure (from insulation and high-performance glazing to green roofs) with local generation, such as rooftop solar.

The goal is to increase energy resilience as much as reduce emissions, says Paola. "Instead of relying on a big, centralised grid, we're working with distributed, local power plants."

Dr Alessandro Premier, who leads the low-carbon solutions and zero-emission economy area, is exploring how urban solar street furniture – such as bus stops and benches – can generate energy on a small scale. His team has co-designed hubs that provide access to e-bikes and e-scooters, with on-site solar panels generating renewable power to help charge them. They're also mapping where city fabrics best support solar.

Another issue is that increasing electrification in our cities poses risks if it's not planned for adequately, says Dr Mohsen Mohammadzadeh. The leader of the centre's Urban Innovations domain says the push for greater electrification raises tough questions about whether New Zealand has the resources and infrastructure to cope. Evening EV charging, for example, already overlaps with peak demand.

"If we don't expand capacity and manage demand smartly, it could be a disaster. The question is, who pays, and are we planning five, ten, 15 years ahead?"

At the household level, Paola and Alessandro have overseen an evaluation (conducted by centre member Luis Medrano) of around 60 government-backed house retrofits in Dunedin, which found a gap between expected and actual outcomes.

"With limited budgets, you get shallow retrofits and one-size-fits-all measures," says Paola. Put a subsidised heat pump in a draughty, single-glazed home and it may hardly warm the place – but it will still cost more to run.

Our workforce is also not sufficiently skilled for deep retrofits, she says, and designers and builders need training tailored to New Zealand's unique housing stock. Because, as Paola points out, only about 2 percent of our buildings are new.

"The clean energy future will be won in the existing city," she says, "if we commit to doing retrofit properly."

Future Cities Research Centre director Professor Paola Boarin (centre) with research area leads (L-R) Associate Professor Manfredo Manfredini, Dr Mohsen Mohammadzadeh, Dr Alessandro Premier and Dr Iresh Jayawardena. *Photo: Chris Loufte*

Associate Professor Mila Adam is exploring how emissions might be locked away as stable minerals, rather than escaping as gas. Photo: Chris Loufte

4 CAPTURING CARBON IN ROCK

In the search for answers to a more sustainable energy future, Associate Professor Mila Adam is turning to stone.

Mila is studying how carbon dioxide can be safely stored in rock, locking it away as stable minerals instead of gas that might leak back to the surface.

The University of Auckland geophysicist says finding ways to securely capture and store CO_2 emissions long term is essential.

"Even with the rapid shift to renewables, New Zealand and the world are not on track to meet their commitments to the Paris Agreement [international climate change treaty]; we'll also need to take carbon out of the atmosphere."

Mila explains that the type of rocks is important, "because they can allow you to convert the CO_2 into a mineral". In particular, she notes that basalt that's rich in iron and magnesium can speed the transformation of CO_2 into solid-form carbonates.

Working in the lab and the field, Mila aims to understand what happens to real, intact rock cores when CO_2-rich fluids flow through them under geothermal conditions. Her team tracks changes in rock porosity and permeability, key to keeping reservoirs in geothermal fields flowing, and uses seismic methods to detect mineral formation underground, offering a way to monitor the performance of CO_2 storage deep beneath the Earth's surface.

In experiments on US and Auckland basalts, carbonate crystals formed in 20 to 30 weeks – a rapid timeframe in geothermal environments.

Mila is part of an MBIE Endeavour programme led by the University of Canterbury's Associate Professor David Dempsey, exploring carbon dioxide removal across several pathways. One of these is bioenergy with carbon capture (BECCS).

A concept with standout potential for New Zealand marries BECCS with geothermal.

The idea is to use forestry slash to boost heat output at geothermal plants, capture the resulting CO_2 in water produced in the plants, then reinject it into potentially reactive layers of rock, where it mineralises. This would create a local, closed-loop system that generates energy and permanently stores carbon.

New Zealand has existing geothermal-field infrastructure and CO_2 is already being reinjected at two geothermal fields. Mila's lab work will help identify the right rock layers that promote mineralisation and avoid simply cycling CO_2 back to the surface.

She's candid about the hurdles – factors such as policy gaps, and iwi and community concerns about induced seismicity and leakage – which the project also aims to address. However, her work could help New Zealand turn two big waste problems – CO_2 and forestry slash – into potential solutions for a lower-carbon future. ■

The University of Auckland's influential 40 Under 40 awards are back for 2025.

These 40 alumni are making their mark in six areas. ***Ingenio*** introduces one from each category here, with profiles of the other 34 online.

PERFORMERS

AMELIA MURRAY BMus
Artist, producer, songwriter, musician, Fazerdaze

AYESHA GREEN GradDipArts, MFA
Artist, Self-employed (profile, page 35)

DYLAN SCHMIDT BCom
Athlete, Self-employed

GRACI KIM BA (Hons)
Author, Self-employed

JOHN-PAUL FOLIAKI BA, LLB
Artist, Self-employed

MADISON NONOA BMus(Hons)
Soprano, Self-employed

RYAN FOX BA
Professional golfer, Self-employed

INFLUENCERS AND CHANGEMAKERS

JEN JONES BProp, MEngSt
Founder and director, Auckland Design Week (profile, page 35)

JEREMY LEATINU'U
BVA, PGDipFinArts, GradDipTchg(Sec)
Kaiako, Te Wānanga o Aotearoa

LEXIE KIRKCONNELL-KAWANA BA, LLB
Chief executive, Impress

MORGAN MCKEEN BEd(Tchg)
Teacher, Milford School

PIYUSH VERMA
PhD Electrical and Electronic Eng
Senior fellow – energy and climate policy, ORF America

TIM MCCREADY BSc, MBioEnt
Strategist, business commentator and event MC

ENTREPRENEURS

AXTON PITT BSc
Co-founder and CEO, Litmaps

BOWEN HE BSc
Director, Webzilla Digital Marketing

JORDAN RONDEL BCom
Founder, Jordan Rondel (profile, p34)

KATE GATFIELD-JEFFRIES BCom, LLB
Co-founder, Moodi

LAYLA KAISI BSc
Director and designer, Layla Kaisi Collection

SAM BLACKMAN BA, LLB(Hons)
Co-founder, Nuvocargo

STEVEN SHUTONG JIANG ME
CEO and product lead, Soarability PTE.

HUMANITARIANS

BRITTANY MYBURGH BA, BFA(Hons)
Assistant professor, Jackson State University

DASHA NELIDOVA BHB(Hons), MBChB
Resident in neurology/ophthalmology, Rehab Basel, University Hospital Basel

JOHN NUUKAI WARD MBChB
Specialist sport and exercise physician, SEQ Sport and Exercise Medicine (profile, page 34)

NATHAN CHONG-NEE MSW(Prof)
Chief executive, Te Rōpū Tauwhiro i Aotearoa, Aotearoa New Zealand Association of Social Workers

NINA HOOD GradDipTchg(Sec)
Academic director, The Teachers' Institute

RACHEL YANG Bcom, MLS
Founder and president, University of Auckland Chinese Alumni Club

RICHARD ADAMS BA
Founder and national director, Taskforce Kiwi

DISRUPTORS AND INNOVATORS

AKBAR ASHRAFI BHB, MBChB
Consultant urologist and robotic surgeon, SA Health and Adelaide Urology Care

JAMES PALMER BA, LLB
Chief executive, CHFA and Community Finance (profile, page 33)

KATE STEVENSON BPA, MA
Co-founder, DOTDOT

MIN-KYU JUNG BA, LLB(Hons)
Co-founder and CEO, Ivo

NINNA GRANUCCI PhD Biological Sciences
CEO, Green Spot Technologies

OLIVIA OGILVIE PhD Biological Sciences
CEO, Opo Bio

SAM CLEARWATER BA, LLB(Hons)
Senior vice-president and counsel, The D. E. Shaw Group

BUSINESS LEADERS

DAN TEO BE(Hons), MEMgt
CEO and managing partner, Radically Consulting (profile, page 33)

HUI WEN TAN LLB
Partner and head of dispute resolution, Jeff Leong, Poon and Wong

JOSHUA CESAN BDanceSt
Artistic director, Identity Dance Company

OLLIE FARNSWORTH BCom(Hons)
Chief financial officer, Tourism Holdings

OSCAR LYONS MBChB
Founder and director, Thrum Leadership

TANNE SNOWDEN BA(Hons)
Founder and CEO, TRONQUE

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BUSINESS LEADER

DAN TEO

CEO and managing partner, Radically Consulting

BE(Hons), MEMgt

Dan Teo, chief executive of management advisory company Radically Consulting, offers a piece of wisdom to anyone thinking of starting a business: don't go it alone.

The University of Auckland alumnus started Radically in 2018 with business partner Edwin Dando. Together they've gone through good times and bad.

On the upside was the satisfaction of winning several large customers and making more than $8 million in revenue just a few years into the company's life. The reverse was seeing their income dry up within a couple of weeks post-Covid.

"I don't know that Radically would be as successful if I hadn't had a great business partner in Edwin," says Dan.

Today, Auckland-based Radically has a customer base that includes Fonterra, Fisher & Paykel Healthcare, Bankwest and Mazda. With more than 30 full-time staff across Auckland, Melbourne and Sydney, where Dan is located, the firm's reach extends throughout Australia and New Zealand.

"I loved working with people more than I did with code."

"Our purpose is to connect humanity and high performance in organisations – typically larger corporates – to modernise the way they work and operate."

He came to management consultancy via a background in software engineering after doing an Engineering degree and Master of Engineering Management. "I quickly learned I loved working with people more than I did with code."

He also loved solving complex business challenges to help organisations win in the market. "Basically, what we do in consulting is apply the same critical thinking and methodical approach to diagnosing business challenges, then come up with a logical plan to address them."

DISRUPTOR AND INNOVATOR

JAMES PALMER

Chief executive, CHFA and Community Finance

BA, LLB

Two companies set up by University of Auckland alumnus James Palmer and backed by the likes of Stephen Tindall are out to help struggling households by disrupting the affordable housing market. And at the stroke of a pen, the government has given James's ambitions a big boost.

The political science and law graduate is founder and chief executive of Community Finance and Community Housing Funding Agency (CHFA). The former manages money that the latter channels to social-housing providers to support the 21,000 Aotearoa households struggling to put a roof over their heads.

Earlier this year the government committed $150 million to CHFA to lend at below-market interest rates to community-housing providers for home-building and rent subsidies.

James says that will allow CHFA, the government, philanthropists, banks and KiwiSaver providers to "come together, pool resources and provide loans at a much lower cost than banks to these charities".

"We've notched up a number of firsts."

It is the pinnacle of his organisations' achievements to date.

"We've notched up a number of firsts when it comes to impact investing – raising hundreds of millions of dollars for charities, bringing different sectors together and helping enact policy change from government.

"But the day we learned we had secured that support, 28 February, is one we won't forget. My team and our backers, including such amazing Kiwis as Anna Stuck and the Tindalls, Lindsays and Edgars, have a lofty goal of helping tackle and beat our affordable housing crisis."

James concedes that ultimate goal will take billions of dollars, but it is "entirely necessary for the sake of our people and the next generation".

ENTREPRENEUR

JORDAN RONDEL

Founder, Jordan Rondel

BCom

Jordan Rondel has learnt a lot about business over the years. But first and foremost among her strategies are trusting her intuition and being herself.

Jordan is the creator of The Caker, a phenomenally popular cult cake company specialising in luxury made-to-order cakes and do-it-yourself cake mixes. She has also published numerous recipe books and was a judge on *The Great Kiwi Bake Off*.

Born in Aotearoa to an Irish mother and French father, Jordan traces her love of baking to childhood trips to Paris visiting her grandparents. Owning a cake business, however, was never on the cards for the 36-year-old, who graduated in 2010 with a Bachelor of Commerce majoring in marketing and international business.

"[My goal is] to create another beloved brand."

In hindsight though, she says her degree "turned out to be a pretty spot-on choice", giving her "the tools to think strategically and communicate effectively".

The Caker began as a side hustle selling made-to-order custom cakes while Jordan was still a student at the University of Auckland. A few years later, after opening a shop on Auckland's Karangahape Road, the business branched out and added luxury cake mixes to its repertoire.

In 2019, Jordan moved to Los Angeles where The Caker's client list grew to include celebrities such as Pamela Anderson, Flea and Miley Cyrus. Last year after more than a decade of success, Jordan made the tough decision to sell the business.

Now she has a new project on the go, blending beauty and emotional wellness. Aimed at Gen Z, her goal is "to create another beloved brand that resonates deeply with people".

HUMANITARIAN

DR JOHN NUUKAI WARD

Physician, SEQ Sport and Exercise Medicine

MBChB

Dr John Nuukai Ward is a specialist sport and exercise physician who works with elite athletes in Australia. He is also dedicated to improving health services for Pacific and Indigenous communities in Queensland.

"I think my upbringing in rural New Zealand has shaped my personality," says John, who grew up in Kaitaia.

"Having family members in less fortunate situations and with poor health outcomes has driven me to want to make an impact."

As the current chief medical officer for Surfing Australia, John covered the 2024 Paris Olympics in Teahupo'o, Tahiti. He is also the chief medical officer for the Dolphins NRL team, the Gold Coast doctor for swimmers at the Queensland Academy of Sport, and the Toa Sāmoa rugby league team's doctor.

"My goal is to make a difference in communities."

John, who is of Sāmoan background and grew up in a predominantly Māori community, has a strong commitment to helping Pacific and Indigenous populations. Following the completion of his specialty training, he is now planning on working with Pacific and Indigenous health clinics in South East Queensland.

"My goal is to make a difference in communities that are less fortunate. I am now in a position of privilege and want to give back to these people," he says.

And despite living in Australia for a decade, Aotearoa is never far from his mind.

"I was given advice when I was training at Kaitaia Hospital to go out and succeed in the world and then bring the knowledge and skills home. This is something my wife and I are planning in the future, when the time is right."

Photo: Holly Burgess

INFLUENCER AND CHANGEMAKER

JEN JONES

Founder and director, Auckland Design Week

BProp, MEngSt

Jen Jones came to the University of Auckland wanting to be an architect. A Bachelor of Property and a Master of Engineering Studies later, she is building a multidisciplinary community of designers.

Since 2023, Jen has been getting Auckland Design Week (ADW) off the ground, intending it to be an annual event that brings together industry, emerging talent and the wider public. ADW, which has been staged for the past two years, aims to "celebrate and strengthen" Aotearoa's creative sector.

"I always knew I'd work for myself, but if you'd told me it would be running a design event, I definitely would have laughed," says Jen, who is self-funding ADW while contracting as a programme manager at Auckland Airport.

"I'm most proud of the community it's built."

"What started as a back-of-an-envelope idea has quickly grown into New Zealand's largest multidisciplinary design event. I'm most proud of the community it's built," she says.

She acknowledges it's a risky venture, but she's determined to see it through without outside investment. A business adviser is helping her shape and scale both ADW and a complementary tech start-up, and he brings "both rigour and belief – and that has been a game-changer", she says.

"I'm also inspired by women who make brave decisions in complex environments – whether in design, business or leadership – especially those balancing ambition with family life."

As Jen also is, with two children aged three and five. And although she has plenty on her plate, she is continuing her studies.

"My one non-negotiable is my weekly philosophy class," she says.

PERFORMER

AYESHA GREEN

Artist

GradDipArts, MFA

For Ayesha Green (Ngāti Kahungunu ki Heretaunga, Kāi Tahu), being an artist means there's little distinction between work and life. Art is always on her mind – a tool to "wrestle with complicated ideas about our reality".

"Being an artist isn't really a nine-to-five job, where you might go home, switch off and pursue hobbies – it permeates my every waking moment," she says.

Raised in Hamilton, Ayesha earned a Bachelor of Media Arts from the Waikato Institute of Technology before graduating from the University of Auckland's Elam School of Fine Arts in 2014 with a Master of Fine Arts. In 2016, she returned to complete a Graduate Diploma in Arts, specialising in museums and cultural heritage.

"It permeates my every waking moment."

"Through my masters degree, I had learnt the language – art as a visual language – but I hadn't figured out what I wanted to say in that language," she says.

"I decided to return to university, as I had some pressing questions around various socio-political issues within New Zealand nationhood, and I wanted answers and some direction about how to seek those answers."

Today, her practice spans drawing, painting and sculpture, with much of her work focused on "mātauraka Māori, nation-building and the relationship between empire and Indigeneity". She's been exhibited widely in Aotearoa, and has completed artist residencies in Brazil, Rarotonga and New York – the latter as recipient of the prestigious Harriet Friedlander Residency.

Ultimately, she says she feels lucky to be absorbed in such a rewarding field.

"The industry I work in is so dynamic and so interesting that if I'm not physically in the studio working, I'm doing something art related."

Feature

Weighing the case for a 'right to disconnect'

Messaging, video calls and email puncture the once-solid line between the office and home. Peter Griffin talks to experts about how we might gain the benefits of flexible communication but avoid the perils of burnout.

We might think that our 'always online' work culture is a thoroughly modern phenomenon, but industrial-organisational psychologist Associate Professor Lixin Jiang traces its roots back more than three decades. Email, text messaging and ubiquitous internet access began as tools to boost productivity and enable flexibility, she notes, but they've also normalised workers' availability well beyond standard working hours.

As the founding director of the University's Master of Organisational Psychology programme, Lixin is clear about the outcome of this normalisation: "It's bad for employee health and well-being; it interrupts their sleep and family life."

People need psychological detachment from work to recover, she says. Without it, performance and well-being degrade. But with unemployment reaching above five percent mid-year in New Zealand, and job listings at record lows, job insecurity and an expectation to be available can ratchet up the pressure on workers.

"If you see your supervisor sending you emails at 10pm, you may feel the need to respond," says Lixin.

Dr Joanne Mutter, a senior lecturer in human resources at the University's Business School, agrees that the tech-enabled "expectations of connectivity", which compounded during the pandemic, make it difficult for workers to switch off. That erodes the quality of their decisions, she says, and elevates stress levels.

She points to the psychology of place: commuting once provided a cognitive boundary – the car or bus ride home drawing a line under the day's work. Now, home offices, complete with remote access to company networks, make detaching harder.

Some countries have responded by codifying a 'right to disconnect' into law. France pioneered it in 2017, requiring firms with 50 or more employees to negotiate rules on after-hours digital tools or adopt a charter, embedding the norm without a blanket ban.

Portugal went further, making it unlawful for employers to contact staff during rest periods and enabling fines for breaches. Australia's national reform, which came into effect in

August 2024, gives employees the right to refuse after-hours contact unless refusal is 'unreasonable', factoring in role, urgency, disruption caused, and personal circumstances.

While no such laws currently appear on New Zealand's horizon, Simon Schofield, a professional teaching fellow at Auckland Law School, sees value in us also instituting a statutory right to disconnect.

New Zealand has a web of legal mechanisms that can address extreme cases, but it's complex. The Minimum Wage Act's 40-hour week can be contracted around, while 'availability provisions' require reasonable compensation if workers must respond after-hours, for example. Employees can bring personal grievances for 'unjustified disadvantage' over excessive hours and even claim constructive dismissal, while the Health and Safety at Work Act imposes duties to manage fatigue, with prosecutions when risks aren't controlled.

Simon says in practice, however, after-hours pressure often surfaces indirectly: 'I worked really hard on this project and then I had a breakdown', rather than as clean test cases about late-night texts. That's why he favours a clear right to disconnect that aligns with existing law but clarifies norms.

"Ideally, you'd have legislation to clean up this area." A right to disconnect is a 'negative right to not have to respond' – a simple rule that "lets employees know what their rights are", he says, cutting through legal complexity.

Joanne is more sceptical that regulation provides the answers, warning it can backfire for those who benefit from the flexible timing of work communications.

"You're either an integrator or you're a segregator when it comes to work," she says.

"Blanket restrictions like 'you cannot send an email after six o'clock at night', don't work for everybody," she says, adding they could undermine gains in female workforce participation and support for caregivers. Joanne's preference is to promote more mature organisational norms around "asynchronous connectivity".

"It makes clear that I'm allowed to send you an email, but I do not expect your response outside work hours," she explains.

Such provisions should be championed from the top of organisations and backed by simple tools, such as email signatures that signal expectations.

Culturally, New Zealand isn't notably better or worse than its peers when it comes to expecting workers to respond after hours, says Lixin. She contrasts New Zealand's work culture with that of China, where deference to supervisors makes after-hours availability more normalised.

"It's definitely worse there than in New Zealand," says Lixin, who hails from mainland China.

While she doesn't see our organisational culture changing any time soon, she doesn't necessarily think legislation is the answer. It's still not clear what impact such laws have had offshore, she says. Also, at a time when businesses are struggling to improve their productivity, the underlying pressure to contact employees after hours may still remain.

Her focus is on leadership: "If leaders and supervisors support the balance between working life and family life, employees will have an easier time disconnecting, and that will have better health consequences."

Finally, she points out, there are small steps workers can take to avoid falling into the trap of working at all hours.

"I've deleted my work email from my phone to avoid constant checking," she says. "I do hope people can embrace this culture of not being continuously available." ■

"If you see your supervisor sending you emails at 10pm, you may feel the need to respond."

– Associate Professor Lixin Jiang, Faculty of Science

Kennedy Graham with his wife Marilyn, pictured in 2017.

KENNEDY GRAHAM GLOBAL CITIZEN

The former diplomat, academic and politician tells Megan Fowlie about traversing the world and some of its hottest issues.

As Kennedy Graham drives away from the Waiheke Island ferry terminal, there's a tussle with his EV; 'a petulant adolescent' ahead applies the brake as Kennedy accelerates. It's a fitting scenario for a man who has forged a path before others were ready for change.

That path, covering 105 countries, carves into some of the world's hottest issues: apartheid, nuclear arms, climate change and global security.

Originally, the diplomatic path was not in Kennedy's sights. His childhood dream was to be an All Blacks halfback; his career plan was accounting. Both had promise, but neither was to pan out. While an undergraduate at the University of Auckland, he lost his best friend. "I stopped playing rugby and began to take life seriously," he says.

He completed his BCom (accounting) in 1968 but, in a snap decision, veered into political studies, first at Auckland, then Wellington. His interests and aspirations became international, then global.

In 1971, Kennedy wrote his honours thesis 'New Zealand on Apartheid'. That was a decade before apartheid tensions were boiling over around family dinner tables and rugby sidelines. He was 23, married with kids, studying part time and a year into a secondment with the Ministry of Foreign Affairs. Kennedy had access to sensitive government and activist group files, and subsequently his thesis wrestled with the Official Secrets Act. It was never published.

By the mid '80s, Kennedy had completed his masters in international law and diplomacy at Fletcher School, Boston; an internship in the UN secretariat; two Foreign Affairs postings to Canada; and then his doctorate, at Victoria University of Wellington, on the nuclear-weapon-free zone. Back inside the ministry again, he was negotiating the Rarotonga Treaty, the blueprint for a nuclear-free South Pacific. Next, posted to Geneva, he continued diplomatic wrangling.

"I was the manic theorist, writing about global security. New Zealand was the recalcitrant. I was being taken to lunch by the Soviets, never the Americans. Perestroika and glasnost had kicked in," he recalls.

"I was a fish happily swimming in the diplomatic sea – but that duly came to an end."

Kennedy says the actions of New Zealand's public movement protesting nuclear testing, nuclear-armed ships in our harbours, and the sinking of the *Rainbow Warrior* were "hugely symbolic". But it was the legal and governance dimension where Kennedy put his efforts: promoting the theoretical rejection of nuclear deterrence. The then-Prime Minister David Lange articulated this at the Oxford Union Debate in 1985 and, days later, at the UN Conference on Disarmament.

It didn't sit well with our allies. The US and UK were aghast that Denmark might follow New Zealand's lead. A nuanced but deep change of policy followed. "The rejection of nuclear deterrence was no longer 'for export'. So, I left."

After the ministry, Kennedy found his intellectual freedom as secretary-general for Parliamentarians for Global Action (New York), two blocks from the UN. He bounced around the world, meeting heads of state and dignitaries, including Nelson Mandela.

New York was also the scene of his life's 'meet cute', at the 1990 election party held in his Manhattan flat. His brother Doug entered Jim Bolger's cabinet and Kennedy met Marilyn, his second wife. "We knew that evening. It's been 35 years of a very happy marriage."

While in New York and at Cambridge University, he edited a book called *The Planetary Interest*, which contained contributions from 20 MPs from around the world, including David Lange, and a foreword by Kofi Annan. He was subsequently appointed director of the UN University's Leadership Academy in Jordan. "Taking the UN oath is one of the most fulfilling things I've done: 'Don't take instructions from any government, including your own; you are serving humanity'."

He later served nine years in parliament for the Green Party, focusing on climate change.

Outside of parliament, he founded a global studies institute for New Zealand – a concept he had advocated for nearly two decades earlier. Today, Kennedy, 79, manages the U3A-Waiheke, with six study groups, chairing philosophy. He lunches with his founding class (1952) from Victoria Avenue School and St Kentigern College mates. Then, there's the book chapter he is writing on the Antarctic Treaty and the 21st-century global order.

"I've gone from the national to the global, back to national, and now, for the first time, to communal. It's all good."

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.

7 TIPS ... TO STICK TO YOUR NEW YEAR'S RESOLUTIONS

In late December, many of us set resolutions with the best intentions, only to watch them disappear faster than leftover mince pies. But the science of behaviour, says Lily Stadlober, teaches us that making resolutions stick is less about willpower and more about designing the right systems. Here are her tips.

Lily Stadlober

1 Be behaviour focused
Focus on clearly defined behaviours that include what you will do, how often and when. Rather than 'drink more water' or 'exercise more', for example, try 'drink a glass of water before each meal' or 'run for 30 minutes every morning' instead. Focusing on observable behaviours that have a clear frequency and timing makes change measurable and achievable. It also reinforces change, as it's easier to notice any positive feelings or feedback you get from engaging in the behaviour.

2 Break goals into achievable steps
Large goals can feel inspiring but often result in them being abandoned before you've even begun. Break the bigger picture into bite-sized pieces that you can easily achieve. Start by identifying the smallest possible step you can succeed with, such as a five-minute walk each day or attending a yoga class once a week. It's better to make slow progress than none at all. And as each step becomes routine, you can gradually increase the scope of your goal in achievable increments.

3 Monitor progress
Simply keeping track of your behaviour can help change it. Self-monitoring increases follow-through by keeping you aware of what you're doing. Keep it simple by using a tick chart, tally sheet, notebook or habit app. Without tracking, it's hard to know what's working. Monitoring also helps you recognise when you've achieved your goal and can set your next one.

4 Enlist a check-in partner
Use your network to hold you accountable. Set up someone to check in with regularly who can help you stay accountable. This might simply involve sending a friend, family member or colleague (perhaps someone with a similar goal) a daily text message to let them know you've achieved your goal. Regular check-ins build consistency and remind you that you're not doing it alone.

5 Use reminders as prompts
Our environment constantly cues our behaviour. Add helpful prompts such as alarms, visual reminders, or laying out materials in advance to increase the likelihood you will follow through. For example, leave your sneakers by the door as a reminder to go for that daily walk. Make the desired behaviour easy to access and hard to forget (or ignore).

6 Celebrate small wins
Behaviour that gets reinforced is more likely to stick, so celebrate each step, not just the end goal. For example, you may reward yourself initially every day when you meet your goal, then over time move this to every second day. Your reinforcement might take the form of a favourite activity, a short break or just a satisfying tick. Think about what feels rewarding to you – this differs for everyone – and keep the reward immediate and big enough that it keeps you motivated.

7 Review and adjust the system, not yourself
If you slip up, it doesn't mean you have failed. Instead, see it as useful feedback. This is why self-monitoring is so important, as it helps you see if your plan is working. Ask yourself: was the initial goal too challenging? Were the reminders or rewards missing? Did you try to change too many things at once? Adjust your approach and make your system work better for you.

Registered Psychologist and Board Certified Behaviour Analyst Lily Stadlober is a professional teaching fellow in the School of Psychology, Faculty of Science.

Taking Issue

DO PROTESTS WORK?

Collectively taking to the streets with placards in hand has long been a way for citizens to call for change. But in the age of social media, increased disengagement with democratic processes and sluggish reactions by politicians to some of the world's most pressing issues, we asked three academics if protests are still an effective means to bring about change?

Carisa Showden

A SOURCE OF HOPE, JOY AND ENERGY

When asked if protests are still effective, my first responses are "of course!" and also "what do we mean by effective?"

Protests always have multiple goals. One of the most important is to give activists and supporters hope. When filling the streets with others who are chanting and singing, bringing their best and snarkiest signs, hooting and hollering, people feel energised. When my research team and I were working with Aotearoa-based activists, campaigners used words like 'joy', 'empowered', 'bulletproof' and 'resilient' to describe how protest actions made them feel.

We know from overseas studies, too, that these kinds of actions are essential for keeping hope alive when facing down existential threats like colonialism, climate change and authoritarianism.

One reason for this positive effect is because protests are often heaps of fun, and fun is a good antidote to the heaviness of the challenges we're facing.

Another reason is that hopefulness also stems from the feeling of community that comes through taking action with others. Being with people who care about the same things we do reminds us that we're not alone in this work. These actions sustain activists through hard times, including when politicians are dismissive or slow to respond.

Protests have only ever been one tool in the activist toolkit. Most people don't expect that marches will be the one thing that flips parliamentarians' votes or moves the dial in a big way on public opinion. But these events do raise awareness about issues and let both the public and government officials know that citizens are watching and they care. Protests are also great for getting media attention, and an effective protest is one that gets good headlines. Plus, you might even recruit a few new supporters to the cause.

Rage Against the Regime, Hīkoi mō te Tiriti, No Kings!, Fridays for Future – there's a reason protests are becoming more, not less, frequent. When people feel threatened or see mass injustices taking place, they seek each other out. Protests are very effective at providing support, joy, fun and a sense of possibility. There is hope in taking action!

Carisa Showden is an associate professor of sociology in the School of Social Sciences and one of the authors of *Fierce Hope: Youth Activism in Aotearoa*.

Eru Kapa-Kingi

ACTIVATIONS GO BEYOND PROTEST

Do protests work? My response – no – will likely surprise most. To be clear: protests don't work, but activations do.

My philosophy in the field of tangata whenua-led change is that for something to 'work', it must draw a social bridge between current realities and a future of meaningful change, with dignifying realities for all peoples. My generation of te iwi Māori describe this as Hawaiki Hou (a new Hawaiki).

Protests are not designed to and therefore cannot achieve this ever-moving goal of generational change for Aotearoa. This is because protests object to what is or what is soon to be, and focus on defending against imminent threats – those threats being part-and-parcel of the overarching reality.

These threats may be socioeconomic, political, legal or all of the above, and may well be neutralised through powerful acts of protest. The work of protest is therefore integral to minimising harms to marginalised communities, but beyond that objective, the all-consuming reality remains.

Take the classic example of objecting to the unjust acquisition of Māori land. Protesting this threat may stop it from happening altogether, and is a highly necessary action for tangata whenua; tikanga Māori would indeed demand such objection. But beyond any specific outcome, does the protest action on its own unravel the legal system that permitted the theft in the first place? Kāhore (that means no in my iwi linguistics).

Activation, a new-generation term to describe organised political action, goes deeper than defence. It adds a layer to the longstanding legacy of tangata whenua resistance, by expressing a clear intent to also empower and uplift. The intent is to literally activate the imagination and conviction of society towards the idea of new, of different, of better, of mokopuna-centric change. Activation is protest, coupled with a belief in what is beyond, and a social movement towards that goal.

Protests are important, but on their own can risk perpetuating the very cycle of harm created by the overall political and legal system in the first place. Protests cannot exist in isolation. For lasting change they must be joined by activation movements that shift societal attitudes and eventually realise systemic transformation.

Eru Kapa-Kingi is a professional teaching fellow at Auckland Law School and was a leader of the 2024 Hīkoi mō te Tiriti.

Protests are important, but on their own can risk perpetuating the cycle of harm.

What do you think? Have your say.

Facebook: *UoAAlumni*

X *@AucklandAlumni*

The writers' views reflect personal opinions that may not be those of Waipapa Taumata Rau, University of Auckland

Danny Osborne

SHUN 'SLACKTIVISM' TO CREATE CHANGE

From the #MeToo and Black Lives Matter movements to the growing response to what I and many others consider an ongoing genocide in Gaza, people are increasingly taking to the streets to protest.

But do protests actually work? The short answer is, yes. But like most answers, there is an elephant-sized asterisk next to that affirmative.

Indeed, there are countless nuances to consider when examining the effectiveness of a protest. Does the protest aim to change public policy? Or is it to raise awareness of an issue? Or do the protesters simply want to solidify their identity? How one answers the question depends on what we mean by 'work'.

If the goal is to change public policy, then we need an expanded timeframe to give protests the chance to 'work'. Rarely does a single protest change public policy immediately. For example, the Civil Rights Movement in the US – the epitome of an effective movement – began decades before the Voting Rights Act sought to end racial discrimination in voting.

Environmental activists have likewise pushed for climate-friendly policies for decades. Although public policy has yet to fully embrace the goals of the movement, the public has become increasingly aware of the perils of climate change. As such, there is a palpable feeling that change is on the horizon – as long as we stick to it and continue to hold our public officials to account.

Although social media has the potential to increase the success of protests by reaching many people, there is a growing awareness of its drawback: slacktivism. That is, many will 'like' or 'share' a post yet fail to contact their local MP or donate to a cause. As a result, awareness may increase, but actual change may fail to materialise.

As such, we need to fight the urge to simply bolster our identities – whatever they may be – and advocate for actual change. Given the endless challenges facing our generations, including the rising rates of inequality, the effects of climate change, and the democratic backsliding that is occurring globally, we can only hope that protests continue to 'work' in the long run.

Danny Osborne is an associate professor in the School of Psychology.

For other opinions on the subject see auckland.ac.nz/taking-issue-protests

Alumni profile

Julie Biuso, one of New Zealand's best-known food writers, is now writing a work of fiction.

COOKING THE BOOKS

Julie Biuso tells Megan Fowlie about pursuing a decades-old dream: writing a novel.

"I knew straight away that was what I wanted to do, so badly."

– Julie Biuso

Julie Biuso offers me sweet, homemade walnut treats when I meet her at her Waiheke Island home. Outside, her planter boxes are heaving with celery, broccolini, chillies and chard. But given Julie is one of the country's best-known television and radio food celebrities and the author of 16 cookbooks (and one memoir), the greeting isn't entirely surprising.

The seeds of her vibrant career were sown growing up as the youngest in a large, rowdy but well-organised suburban family – and with a lot of grit.

"My mother was a terrific baker," she says. "Tins were always full of gorgeous treats when we came home from school. And my father had a huge vegetable garden."

She first experienced the dopamine kick that would cement a lifetime of sharing food and food writing when her siblings yelped with delight as they bit into the "big fancy toasted sandwiches" Julie made for Sunday night dinners. Her confidence bolstered, she was soon creating designer cookbooks from "ridiculously ambitious recipes cut from magazines". She was 11.

But travel was the real goal. From her first year in high school, Julie worked in restaurants and saved her pay. By the end of her third year, she'd set up a wily plan for her father to sign her passport forms, then headed to Europe.

Making delicious food was not Julie's only talent, though. In primary school, her writing caught public attention when she came first in an ASB short story competition and received the grand prize of a ten-shilling Whitcomb & Tombs book voucher. She credits her writing skill generally, and particularly a letter that she wrote presenting a compelling argument to allow a girl from New Zealand to enrol without an in-person interview, for helping her secure entry to London's elite Cordon Bleu cooking school.

Then, at 22 years old, the Cordon Bleu-trained chef was catering for the well-to-do set in Italy. By 28, she had established and was head teacher at its first cooking school in New Zealand.

Fast forward to present day, and Julie's home not only houses delicious treats, but also volumes of poetry – another writing venture that she started in her childhood bedroom, scribbling "miserable angsty stuff". During the interview, she opens a book on her knee and reads fine cursive handwritten stanzas. 'Emergency Knickers', one of her originals, is wildly entertaining and unexpected.

Up until 2023, Julie also co-ran and performed at the 'Song and Poetry Thing' event on Waiheke Island. She considered studying poetry for a Master of Creative Writing (MCW) at the University of Auckland under Professor Selina Tusitala Marsh. Instead, she opted to study fiction, working on her first novel – a piece of work crafted under the supervision of Associate Professor Paula Morris, director of the MCW. Julie's masters year was limited to an intimate cohort of eight, all novelists.

"A novel has been a dream for decades," she says. When Bill Manhire established the International Institute of Modern Letters at Victoria University of Wellington in 2001, "I knew straight away that was what I wanted to do, so badly. I couldn't, I had young children and was working like a maniac – recipes, radio, television."

Starting the Auckland course, Julie had a nest egg of ideas. The degree taught her "structure, dialogue, point of view, all the tools to maintain tension".

"I'm so grateful that I did it, but [it was] brutal! The first time you're having your work critiqued by your peers, you feel ill. That toughens you up as a writer, and you press on," she says.

At the time of writing, her novel was up to 90,000 words and in its second-draft stage. The plan is to get it published.

All the while, Julie is still cooking, managing Shared Kitchen, a food website she created with her daughter Ilaria, and presenting a monthly session with Jesse Mulligan on RNZ *Afternoons*, 40 years after she started with radio. She's also contemplating whether her granddaughter, two-and-a-half years old, might be ready to make pikelets in an electric fry-pan on the deck, "perhaps in another six months".

Garden leave

From the Collection

One of the joys of life at the University of Auckland – whether you're roaming the halls or the grounds – is being surrounded by work created by some of New Zealand's great artists.

There are almost 2,000 artworks in the University of Auckland Art Collection and, unlike works held in the collections of many galleries and museums, the vast majority are on display.

Some also get to travel. The University regularly loans artworks for exhibitions at other institutions around New Zealand, such as this painting – 'Kew', by Karl Maughan, which is on show at Nelson's Suter Gallery until 30 November. It's one of two Maughan works from the collection that feature in the exhibition *Karl Maughan: A Clear Day* surveying the artist's early practice.

Known for his cleverly constructed views of gardens and parks, painted in rich colour with meticulous detail, Maughan graduated with a Master of Fine Arts from Elam School of Fine Arts in 1987. 'Kew' was acquired by the collection in 2005.

In 2025, the painting was one of 11 artworks that travelled to other institutions for short-term exhibition loans, including at Toi ō Tamaki Auckland Art Gallery, the New Zealand Portrait Gallery and Te Pātaka Toi Adam Art Gallery at Victoria University of Wellington.

artcollection.auckland.ac.nz

RACHEL PARIS: PORTRAYING THE POWERFUL

The recent Master of Creative Writing alumna tells James Fyfe that working in finance law provided fertile ground when it came to writing about the wealthy.

Your debut thriller *See How They Fall* has been compared with TV shows *Succession* and *The White Lotus*. What are some of the main themes in the book?

On one level it's about toxic rich people behaving badly and the dark side of wealth. But it's also about the collateral damage that can come from the collision of wealth and power when people aren't held to account and how that power can be a corrupting force.

For me, it's also a story of two women facing major obstacles and working together to overcome them.

Before becoming a writer, you spent two decades as a corporate lawyer. How much did your law career inform your writing work?

I guess having an understanding of the law helps when you're writing a crime thriller, but unfortunately I wasn't a criminal lawyer; I was a banking and finance lawyer.

Nevertheless, it helped me for a few reasons. First, I knew how to research, and also in my finance law career I've met a lot of wealthy, influential people, some of whom definitely gave me some fertile ground for the characters in the story. Obviously, my characters are all fictional, but I think when you work in those circles and you meet some of these people, you start to see how that power can be quite a corrupting influence – so that definitely coloured my characters.

How was the experience of returning to the University to complete a Master of Creative Writing (MCW) after previously completing Law and Arts degrees and then going on to have a law career?

It was a real change to come back to university after 20-odd years and to do something so incredibly personal, because for all my corporate career I was sort of putting a lid on creativity. So it was quite freeing, but also quite nerve-racking, as you can't help but feel vulnerable when you're asking people to read what you've written and give you feedback. But the more I got into it, the more I really loved it. It's quite invigorating being back at university and being surrounded by young people who are just excited about learning.

The MCW was fantastic. While you can learn the craft of writing online or from books, there's no substitute for deadlines and structure and an expectation on you to deliver – and there is a real momentum that builds during the course.

Learning from someone like Paula Morris, who runs the programme and is herself a very accomplished writer, and having the support of a community of other writers is what made the difference for me. I don't think it's the actual qualification that matters – no one's going to publish a book just because you've got this masters – but what is valuable is having the discipline and that momentum to carry you through.

You're currently working on your second book. What's it like being a full-time writer now?

It's obviously a delight and a treat to be able to write; it's just such a fun thing to get to do and call work.

It does come with its stresses, though, in the sense that the first time around I was writing with no expectation of being published; I was just having fun. But this time, I've got a deadline and an editor who's waiting for me to deliver something, so there are definitely some nerves around the second book and making sure that people will like it.

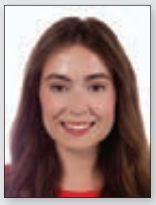
But overall, it's just such a terrific thing to get to do and I feel really lucky.

Read an extended version of this interview: auckland.ac.nz/ingenio-rachel-paris

Rachel will also talk about her novel at an event on campus in December. See page 46 for details.

Rachel Paris's debut novel explores the dark sides of wealth and power.

PODCAST PICKS



Dr Jessica Stubbing is a psychologist specialising in youth mental health, an alumna of the University's Doctor of Clinical Psychology programme, an honorary fellow at Koi Tū: The Centre for Informed Futures, and a member of the Psychiatry Faculty at Harvard Medical School. She tells Nikki Addison about her podcast picks.

What podcast are you currently listening to?
The Psychology of Your 20s. It's a fun and thoughtful podcast from an Australian psychology graduate, who does a seriously impressive job of making psychological research relatable and understandable for young people.

What's next on your episode list?
'Can self-improvement go too far?' I'm excited for this one as it's a question I am hearing a lot recently: at what point does striving to be our 'best self' become more harmful than helpful?

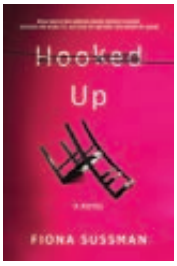
What's your favourite podcast or podcaster, and why?
Spotify tells me my most listened-to podcast is *The Try Pod*. Call me a millennial, I love a laugh on the morning commute! Since spending more time abroad, I also find myself gravitating to the RNZ podcast offerings to keep up with the news in Aotearoa and hear some fresh perspectives.

Do you have a comfort podcast?
Lately I've been loving the rise of the Dungeons and Dragons podcast. I'm not a player, but I love a good story. *Cobbled Together* is my current listen – a silly, joyful delight featuring many Auckland improvised and stand-up comedy-scene regulars and a few University of Auckland alumni.

Are there any podcasts in your area of expertise that you would recommend to others?
If you're interested in youth mental health, I'd recommend 'youth led' podcasts as a great way to learn what young people think about the world and how it is impacting their mental health. I've appreciated *On Our Minds*, a student-hosted podcast from the US, and *She Persisted*, created by a young person who interviews some great mental health professionals.

Links to the above podcasts can be found in the story online: auckland.ac.nz/ingenio-spring25-podcasts

Against the Odds
Professor of Obstetrics and Gynaecology Cynthia Farquhar co-authors this book, which traces the paths of those who became New Zealand's first women doctors, between the 1890s and 1967. It recounts how these pioneers battled challenges, including indifference and chauvinism, to study and practise medicine.
Cynthia Farquhar and Michaela Selway, Massey University Press, $55

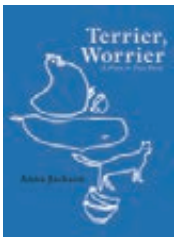


Hooked Up
Faculty of Medical and Health Sciences alumna and former GP Fiona Sussman's latest thriller draws on the world of reality TV. *Hooked Up* is described as highlighting the darker side of the reality TV industry – exposing some of the culture behind show production, and society's seemingly insatiable appetite for real-time drama.
Fiona Sussman, Bateman Books, $39

Oceans Between Us
Associate Professor in Sociology Sereana Naepi (Fijian, Pākehā) edits this collection of ten essays penned by 13 Pacific scholars, including other University of Auckland alumni and staff members. It documents and dissects Pacific peoples' experiences of racism in Aotearoa and serves as a call to action – for change and a future rooted in equity.
Sereana Naepi, Auckland University Press, $40

Pill-Rolling Fingers
This series of poems about early-onset Parkinson's is by Marsden-funded researcher and honorary academic Tara Coleman. It brings together personal poems from her own experience of the condition alongside research poems crafted from the stories of 48 other New Zealanders living with the disease.
Tara Coleman, Atuanui Press, $35

The Secret of the Angel Who Died at Midnight
Faculty of Medical and Health Sciences alumna Rosy Fenwicke has published her second crime novel, centred on the character of DSS Kate Sutton. A whodunnit set in Martinborough, it follows Kate as she investigates the murder of the local doctor – only to discover that even in the most idyllic settings, the past never truly stays buried.
Rosy Fenwicke, Wonderful World, $37



Terrier, Worrier
Described as 'part autobiography of thought, part philosophical tract, a book about chickens and family and seasons', *Terrier, Worrier* is a literary sequence from Arts alumna Anna Jackson. One of the country's most distinguished poets, she is currently an associate professor of English literature at Victoria University of Wellington.
Anna Jackson, Auckland University Press, $25

Dancing Heart
This collection of new and selected poems, spanning from 1968 to 2024, is from Arts alumna Jan Kemp MNZM, with an introduction by Jack Ross. Jan, who is based in Germany, is the author of ten poetry collections and two memoirs.
Jan Kemp, Tranzlit, $35 (email jantranzlit@gmail.com to order)

CONNECTION POINTS

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MEET

OUR NEWEST ELAM ARTISTS

Explore the work of graduates from Elam School of Fine Arts at the *Elam Artists Graduate Show*, which runs 22-23 November at 20 Whitaker Place. You can view an incredible online showcase and get more info at **elamartists.ac.nz**. Pictured work 'Epistle to Home' by Raymond Zhang, *Elam Artists Graduate Show 2024*.

SEE

THE FUTURE OF THE BUILT ENVIRONMENT

Discover the visionary work of our Master of Architecture (Professional) students on Modos, our dedicated online archive. Exploring social and political challenges and bold design solutions, these projects showcase how architecture can transform everyday life. Explore their ideas, insights and innovations now at **modos.ac.nz**.

STAY, PLAY, TRAIN

WITH CAMPUS SUMMER STAYS

The centrally located University accommodation at Carlaw Park, O'Rorke Hall and Waipārūrū Hall will be taking group bookings from late November 2025 to February 2026. And now there's the added opportunity to use the new Hiwa Recreation Centre, so you can play or train while you stay. There are options for groups of 15 to 500, with catered and self-catered options available. For more information, go to **summerstays.auckland.ac.nz** or email **summerstays@auckland.ac.nz**.

MEET

AUTHOR RACHEL PARIS

See How They Fall, written by lawyer-turned-author Rachel Paris (see page 44), has been touted as '*Big Little Lies* meets *Succession*' and 'one for the fans of *The White Lotus*'. A Master of Creative Writing graduate, Rachel is coming to campus to discuss her thrilling debut novel on 4 December. This event is brought to you by the Virtual Book Club. To find out more and register for the event, go to **auckland.ac.nz/bookclub**.

READ

THE HISTORY OF ALUMNI RELATIONS

By Degrees, by Christine Keller Smith (pictured above), captures the history of alumni relations at the University, including the work of the Alumni Association and the University of Auckland Society. Buy your copy from the Campus Store and support students, with 100 percent of profits going to the University's Student Support Fund. **campusstore.auckland.ac.nz/by-degrees-book**

FOLLOW

RAISING THE BAR ON SPOTIFY

Raising the Bar took over ten Auckland CBD bars on Tuesday 26 August, sharing 20 inspiring and educational talks by some of the University's top academics. Follow Raising the Bar Auckland on Spotify and catch up on the talks you missed: **auckland.ac.nz/rtb**

SEARCH

FOR JOBS AND INTERNSHIPS

Join the University's mentoring platform, Alumni Connect, and power up your job search with new connections. Each of the job posts comes with suggested connections to help you take your job search to the next level. Find a job you like? Reach out to a connection associated with the job to get valuable insights, while building your network: **connect.auckland.ac.nz**

WIN

WHEN YOU UPDATE YOUR DETAILS

Make sure you stay in the loop and get invited to events in your hometown – no matter where that may be – by keeping your address and email updated. If you update your details before 28 February 2026, you'll automatically go in the draw to win one of five $500 PB Tech vouchers. Head to **alumni.auckland.ac.nz/update** to check out the current prize, and update for the chance to win.

ELEVATE

YOUR CAREER WITH ONLINE STUDY

Enjoy the freedom of digital learning, designed to let you study wherever you want, whenever you want. Auckland Online allows you to complete a prestigious qualification from the University of Auckland at your own pace. The programmes are purpose built to fully leverage online flexibility, interactivity and the latest research. Visit **online.auckland.ac.nz** to learn more.

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PURCHASE

OFFICIAL MERCH

Proudly show your connection to the University of Auckland with official merchandise from the Campus Store. From apparel and accessories to stationery and gifts, there's something for every proud alum. Check out the 'Back Shield' and 'Vintage' ranges available now. Visit us at the Quad, City Campus (34 Princes Street) – open Monday to Friday – or shop online anytime at **campusstore.auckland.ac.nz**.

A Gift To The Future

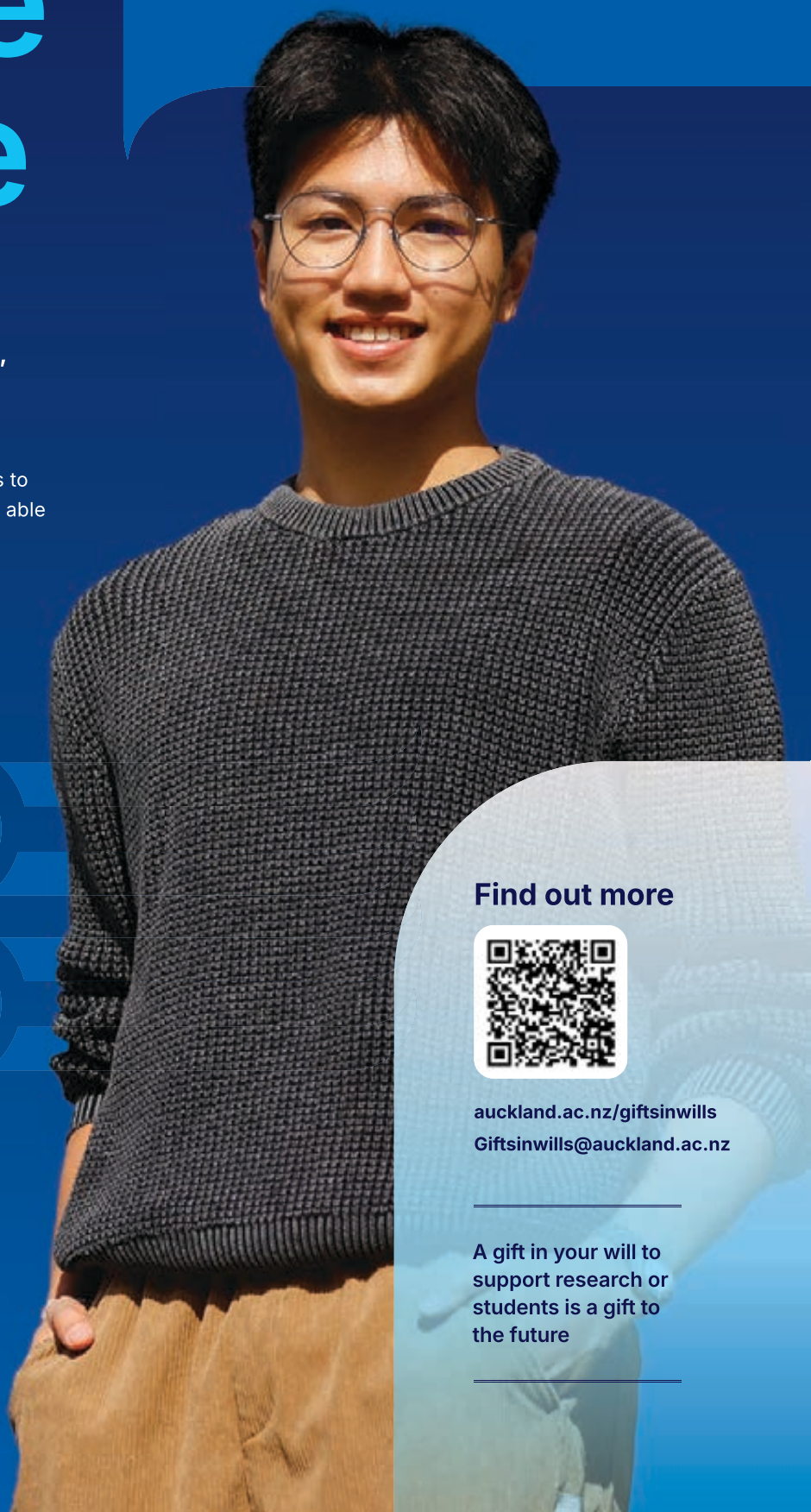
In 1884, Thomas B Gillies, a judge in the Supreme Court of New Zealand, gave £3,000 to set up scholarships in science.

The intention of Thomas and his late wife was to support students who might not otherwise be able to attend university.

More than 200 students have now benefitted from their vision.

“Having a stranger support me with this act of kindness has been very inspiring and encouraging.”

WILCO NG
Gillies Scholarship recipient | Applied Physics student



Waipapa Taumata Rau
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Find out more

auckland.ac.nz/giftsinwills
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A gift in your will to support research or students is a gift to the future