

WAIPAPA TAUMATA RAU | UNIVERSITY OF AUCKLAND

Ingenio

auckland.ac.nz/ingenio

ALUMNI MAGAZINE

—
SPRING 2023
—

BUILDING RESILIENCE

INNOVATIVE
RESEARCH TO IMPROVE
OUR INFRASTRUCTURE

What's 'normal'?
Goals for inclusive
education

Tom Sainsbury:
in defence of
social media

Meet a 100-year-old
historian who is
still writing

BIG PICTURE





ROLLING IN THE DEEP

The University of Auckland's research vessel, *Te Kaihōpara*, lies at anchor at the Poor Knights Islands Marine Reserve while the marine science team carries out underwater dive surveys.

Image: Paul Caiger, dive safety officer and senior technician at the Institute of Marine Science, using a full-frame camera (Canon 5DIV) in an underwater housing, plus strobe lights.

this issue

24

Blockbuster brainwave

Boost for movie-review platform Letterboxd, devised by two computer science alumni

26

Balancing act: tourism and sustainability

Tourist dollars are important, but so is the way we earn them. Can tourism have a sustainable heart?

28

Meet 2023's 40 Under 40

Introducing 40 inspirational alumni making their mark in six fields of endeavour

32

Ned Fletcher overturns assumptions

Historian comes to a surprising conclusion over sovereignty in the Treaty of Waitangi

36

Posthumous honorary doctorates awarded

The University honours Bruce McLaren, Kate Edger and Epeli Hau'ofa to mark its 140 years

40

More than a bit of culture

Alumna Sarah Smart is on a right-royal adventure in the UK, heading a yoghurt company

REGULARS

6

Editorial

7-9

News

16

Guest columnist
Tom Sainsbury

17-19

Research

34

7 tips to combat
seasonal allergies

38

Around the Globe

41-45

Arts and Books,
including a
favourite artwork,
author profiles,
arts news and
new books

46

Connection Points



SUSTAINABLE

The wrap around *Ingenio* is 100 percent degradable and recyclable. This magazine is also printed on environmentally friendly paper stocks. Please see page 47 for information about keeping your subscription to the printed magazine.



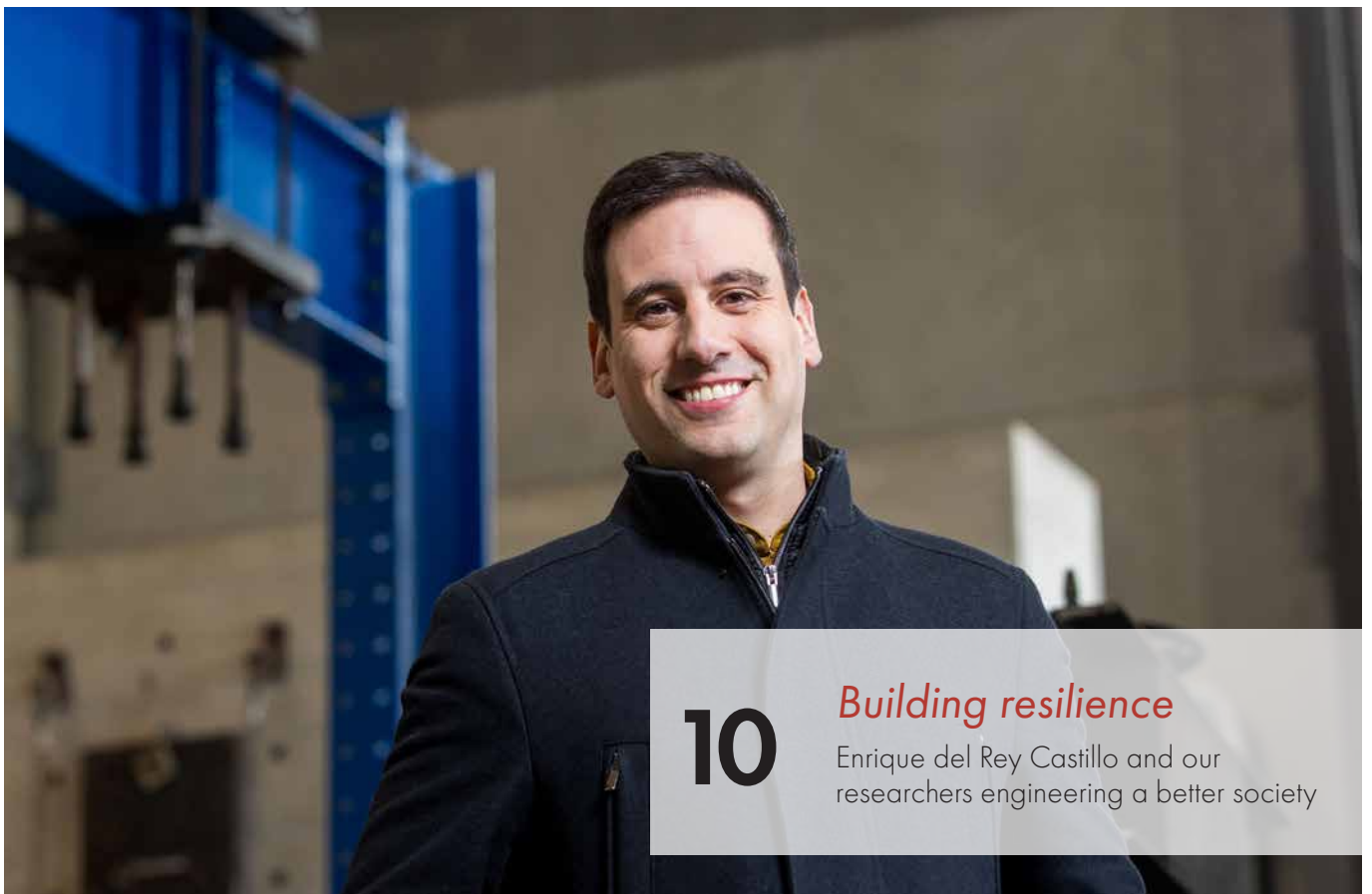
20 **No such thing as 'normal'**
Neurodivergent thinking: from struggles to success stories like Jules Skelling



25 **Afghanistan to Auckland**
When the Taliban seized Kabul, judge Raihana Attaee was forced to hide



35 **Still writing**
At 100, Professor Russell Stone keeps penning his thoughts for posterity



10 **Building resilience**
Enrique del Rey Castillo and our researchers engineering a better society

Ingenio

Waipapa Taumata Rau,
University of Auckland
Alumni and Friends magazine

Spring 2023
ISSN 1176-211X

Editor Denise Montgomery

Executive editor Helen Borne

Design Megan Ebsworth

Feature photos

Chris Louffe

Ingenio consultation group

Peter Cullinane, Associate
Professor Luke Goode, Aroha
Mane, Finlay Macdonald

Ingenio editorial contacts

Communications
University of Auckland
Private Bag 92019,
Auckland 1142, New Zealand.
Level 3, Alfred Nathan House
24 Princes Street, Auckland.
T: +64 9 923 6061
E: ingenio@auckland.ac.nz
W: auckland.ac.nz/ingenio

To receive Ingenio

To continue to receive *Ingenio*
and subscribe to @auckland,
our email newsletter for alumni
and friends, enter your details at:
alumni.auckland.ac.nz/update
See pg 47 to update and win.

Alumni Relations Office

University of Auckland
19A Princes Street,
Private Bag 92019,
Auckland 1142, New Zealand.
T: +64 9 923 4653
E: alumni@auckland.ac.nz
W: alumni.auckland.ac.nz

Disclaimer: Articles may reflect
personal opinion that is not that
of the University of Auckland.

Copyright: You may reproduce
our stories with consent.

Email: ingenio@auckland.ac.nz
All rights reserved.

© Waipapa Taumata Rau,
University of Auckland, 2023



Cover image: Coromandel
flooding from Cyclone Gabrielle,
captured by NZ Herald
photographer Mike Scott



Editorial

HEALTH INNOVATION HUB GOOD FOR ALL



Having worked in healthcare research and been an intensive care specialist clinician (neonatology), I have a strong interest in technology that enhances the clinical experience for physician and patient. I've seen huge benefits from advances in medical technology.

That is why it is exciting to see the home-grown success of the country's medical technology (MedTech) sector. From just 40-50 companies in 2010, we now have a domestic MedTech sector valued at \$2.1 billion, with more than 200 medical companies involved in devices, digital health and health IT.

While the dominant players are well known and established (such as Fisher & Paykel Healthcare and Orion Health), increasingly, innovation has been through MedTech start-ups, some of which have originated at Waipapa Taumata Rau, University of Auckland.

Formus Labs is one of these success stories: founded in 2016 by Dr Ju Zhang (see page 29) and Professor Thor Besier (Auckland Bioengineering Institute), it has developed cutting-edge AI-powered orthopaedic surgery software. This provides surgeons with medical imaging and biomechanical simulation to help model the best quality reconstruction for patients before surgery. In May, Formus Labs was cleared by the US Food and Drug Administration (FDA) for its Hip Platform to be used for hip replacement pre-op planning in the US market. In June, Formus won both the software and deep-tech categories at the 2023 NZ Hi-Tech Awards. Innovative start-ups like this enhance patients' quality of life and contribute to efficient, cost-effective healthcare.

Another example is Alimetry, led by Professor Greg O'Grady, which has developed a non-invasive device to help diagnose stomach problems and other gastric issues. Data from electrodes placed on the abdomen, combined with patient feedback on their symptoms, provide a richer dataset to help clinicians determine treatment pathways. In 2022, Alimetry also received FDA clearance, for the

use of its device in the US market for gastric diagnoses. In the same year, it swept up three NZ Hi-Tech awards for Innovation and was a finalist at the MedTech Innovator Asia Pacific Challenge for regional MedTech start-ups.

While both globally recognised start-ups have been Auckland-based, the MedTech environment in New Zealand is very much defined by national collaboration. The Consortium for Medical Device Technologies (CMDT, formed by five universities including this University) and the government's innovation agency Callaghan Innovation have helped connect the MedTech innovation ecosystem, incubated start-ups such as Formus Labs and Alimetry, and led the direction of the national MedTech Centre of Research Excellence.

Although there have been many MedTech successes, we cannot rest on our laurels. The commercialisation path can be long for MedTech start-ups, given the strict regulations associated with healthcare, and there is the opportunity to scale up our existing start-ups and develop the pipeline for new ones.

This is the thrust of CMDT's latest initiative: Medtech-iQ Aotearoa. Medtech-iQ Aotearoa is a national innovation hub focused on medical devices and digital health. It comprises four interlinked regional hubs situated around our universities and hospitals/clinics, modelled on globally successful health innovation hubs.

The main goals of the initiative are to attract new partners and investment in this vital health area, to foster start-ups with business models based on high-tech innovation in engineering or science, and to create a consumer-centric MedTech innovation environment that delivers new healthcare solutions.

Medtech-iQ Aotearoa can't just remain a pitch. It needs substantial investment to help it materialise. It is an invitation to governments, institutions and industry to come together for a shared transformative goal – improved health outcomes (especially where gaps exist), knowledge-based and export-focused jobs and a more prosperous Aotearoa New Zealand.

PROFESSOR FRANK BLOOMFIELD

Deputy Vice-Chancellor Research

Waipapa Taumata Rau, University of Auckland

HONOUR FOR SCIENTIST

Cristin Print has been recognised for his collaborative genomic research to better understand cancer treatment. By Danelle Clayton

Professor Cristin Print won a Kea World Class New Zealander award at a ceremony held at the Viaduct Events Centre in September. Kea is an expat organisation that celebrates New Zealanders making a global impact.

Cris, from the Department of Molecular Medicine and Pathology in the Faculty of Medical and Health Sciences, is a genomics researcher who has been quietly working to solve some of the mysteries of cancer. He is leading a project that will use genomic data from 100 Auckland cancer patients to investigate how therapies can be better targeted.

“Genomics is like playing a game of chess against tumours,” he says. “Working as a team, we are trying to outmanoeuvre the tumour and ultimately get it into checkmate.”

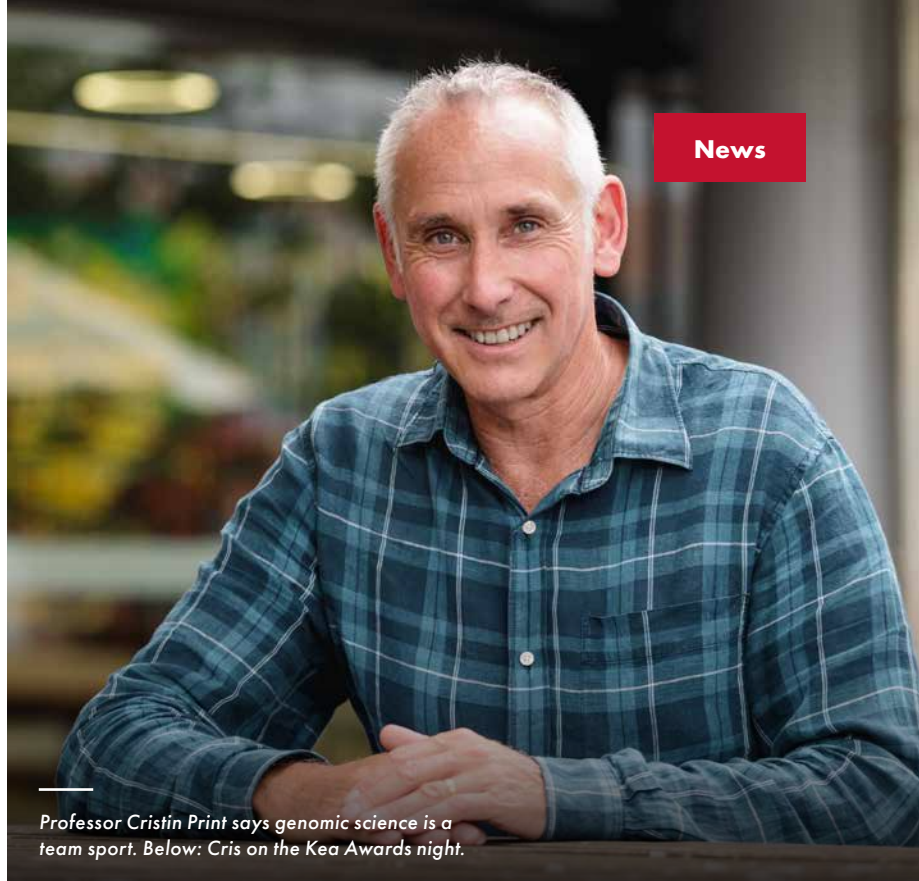
“I’m sure I’m not a world-class New Zealander as an individual,” Cris says, despite dedicating 35 years to understanding cancer and other genetic diseases. “However, I would agree to the importance of collective power. Genomic science is a team sport and it works best when everyone from clinicians through to hard-core mathematicians works collectively. My contribution is to have been lucky enough to bring several teams of great people together.”

Cris and colleagues work hard to ensure New Zealand is part of the global research community, ushering in a new era of precision medicine which is widely regarded as the future of healthcare. It involves a person’s individual genome being used to inform a tailored treatment, for instance to destroy a tumour.

“It’s an area that’s moving very quickly and we will see some incredible advances in treatments in the next ten to 20 years.”

Cris graduated from the University in Medicine and Surgery in 1989, returning to his alma mater twice, first to undertake a PhD with professors Jim Watson and Geoff Krissansen, where he was one of the last generation of scientists to discover a previously unknown human gene. It was initially named CG-1 after Cris and Geoff, and later named Kinectin.

He returned in 2005 to build a research team in the fields of genomics and bioinformatics. He had just spent six years as a Fellow at St Edmund’s College at Cambridge University



News

Professor Cristin Print says genomic science is a team sport. Below: Cris on the Kea Awards night.

in the UK where, at the time, the Human Genome Project had just mapped all the genes of human DNA. Genomics was at the forefront of transforming the study of medicine.

Cris has maintained valuable international networks with top geneticists in the UK and also Asia, where he co-founded an international biological technology company that was listed on the Tokyo Stock Exchange in 2007.

Today he co-leads several genomics initiatives with his Auckland precision medicine colleagues and DHB clinicians across New Zealand, with the common vision of improving patient care.

He is particularly proud to have contributed to pathfinder project Rakeiora, a co-innovation with Māori leaders to build a framework for research with genomic data that considers Aotearoa’s unique people and culture. The aim is to give people confidence in the control, safety and sovereignty of their data.

He has also held multiple science governance positions, including leading the NZ Society for Oncology, the University’s Bioinformatics Institute, the Scientific Board of the Auckland Regional Biobank and, through the Covid pandemic, he worked as a director then acting chair of the Crown Research Institute Environmental Science and Research.

“The technology we have to treat disease is incredible compared with what existed 30 years ago,” he says.

“It’s like we were looking through a small porthole in the 1990s, to now having these great wide ranchsliders overlooking an ever-changing molecular landscape of a patient’s tumour. With each small improvement in our knowledge and technology, we’re getting a better view.”

“Genomics is like playing a game of chess against tumours.”

– Professor
Cristin Print



HEALTHY RESEARCH BOOST

Funding for vital health research greatly assists key projects

Research on a quit-vaping product is among ten University of Auckland projects to receive \$12m from the Health Research Council (HRC).



Associate Professor Natalie Walker and her team will use their \$1.4m grant, over three years, to carry out a large community-based clinical trial of two low-cost interventions to help New Zealanders stop vaping. The trial will test whether cytisine – a natural product that partially blocks the effects of nicotine on the brain – is more effective than a tapered reduction in nicotine, when accompanied with support by text from Quitline.

“Over time, people who vape may also wish to stop, yet little evidence exists on the best ways to support them to do this,” says Natalie. “Our trial plans to add to that evidence base, as being both smoke- and vape-free is the ideal for health.”

Other work to be aided by HRC funding includes research led by Dr Tess Moeke-Maxwell for the Rangahau Hauora Māori project (FMHS, Te Arai Palliative Care and End of Life Research Group) to explore Māori whānau experiences of assisted dying (\$1.1m); research by Professor Winston Byblow (FMHS) into a tool to predict stroke recovery (\$1.1m); and Trans-Tasman research led by Associate Professor Sarah Hetrick (Science) to test three mental health apps in the prevention of youth suicide (\$1.4m).

Full list and story: auckland.ac.nz/2023-hrc

Left: Professor Natalie Walker is leading a research project on a quit-vaping product.

LEGACY TO NEUROSCIENCE

A gift in the name of the late Dame Rosie Horton will support research

A \$2 million endowed gift to the University’s Centre For Brain Research (CBR) will honour Dame Rosie Horton, a long-time supporter and champion of the CBR.

Philanthropist Michael Horton has made the donation in memory of his wife, who died in May, to establish the CBR Dame Rosie Horton postdoctoral research fellowship in neuroscience.

“The postdoctoral research fellowship will be a key driver in attracting world-class, mid-career researchers and in developing future neuroscience research leaders in New Zealand,” says Distinguished Professor Sir Richard Faull, Director of the CBR.

Michael and Dame Rosie have been generous supporters to various areas of the University of Auckland, also funding the Michael and Dame Rosie Horton Prize in English Literature, which was established in 2014, as well as research at the Liggins



Institute and a lectureship at the Faculty of Science.

They have attended numerous University events over the years, including the annual Distinguished Alumni Awards, gala events and music performances.

“From 2009, Rosie was an enthusiastic and committed founding Ambassador of the Centre for Brain Research,” Richard says.

“She made an extraordinary contribution to its success through her enterprising ‘reach for the stars’ approach to both networking and fundraising. The new fellowship will continue her wonderful legacy.”

Dame Jenny Gibbs, Distinguished Professor Sir Richard Faull and Dame Rosie Horton at a launch event for the CBR neurosurgery campaign in 2021. Photo: Tiger Photography

HARDING FOR PRESIDENT

Dame Jane Harding adds Royal Society role to accolades

The Royal Society Te Apārangi has appointed Distinguished Professor Dame Jane Harding as its next president. A neonatologist with more than 35 years' experience in research, teaching, and practice in clinical medicine, she takes up the position in July 2024, taking over from Dr Brent Clothier. The role sees her chair the Council and act as the face of the Royal Society, alongside the CEO, and is similar to a chancellor's role at a university.

Dame Jane says her mission at the Liggins Institute aligns with that of the Royal Society.

"My career has been dedicated to the pursuit and sharing of knowledge ... supporting a diverse research ecosystem, and to the recognition of excellent research. I'm deeply committed to ensuring that the Royal Society Te Apārangi continues to deliver on that core mission."

Dame Jane won a Rutherford Medal in 2019 and the Prime Minister's Science Prize in 2022. **Read more: auckland.ac.nz/harding-president**



Distinguished Professor Dame Jane Harding becomes president of the Royal Society Te Apārangi in July 2024.

Photo: Royal Society

STATE-OF-THE-ART LEARNING SPACE

Stunning rebuild to become a new teaching space for faculties in 2024

The building at 10 Symonds Street has been impressively refurbished as a world-class example of 'adaptive reuse' and sustainability. The 50-year-old building, known as B201, features rainwater harvesting and solar photovoltaic systems as well as native roof-top planting. It has earned the highest, 6 Green Star, design rating from the New Zealand Green Building Council.

"This project has been a huge success in demonstrating we can provide world-class facilities that meet our sustainability objectives,"

says the University's Maria Baldoni, associate director of Sustainable Estate and Operations.

Māori cultural concepts and narratives informed the building's design. Kaiarataki Michael Steedman, Office of the Pro Vice-Chancellor Māori (OPVCM), says mana whenua and kōtuitanga partner Ngāti Whātua Ōrākei representatives guided the cultural engagement process, with design agency Haumi and the OPVCM. "We're proud the building is an experiential platform that demonstrates our bicultural and sustainability principles," he says.

From 2024, B201 will provide state-of-the-art teaching, learning, research and administration space for the faculties of Arts, Creative Arts and Industries (CAI), and Education and Social Work (EDSW) following Education's move from the Epsom Campus.

Story and video: auckland.ac.nz/b201-unveiled

Below: The B201 atrium. Below left, L to R: Professor Nuala Gregory (Dean of CAI), Vice-Chancellor Professor Dawn Freshwater, Professor Robert Greenberg (Dean of Arts) and Professor Mark Barrow (Dean of EDSW).

Photos: Dean Carruthers



BUILDING RESILIENCE

Cyclone Gabrielle was a brutal reminder of the vulnerability of our infrastructure. Floods, earthquakes and climate change-induced disruptions have left scars on communities and exposed the fragility of essential services, housing and transport systems. University of Auckland researchers are working with communities, government agencies and other partners to develop resilient, sustainable infrastructure and housing solutions. Owen Poland meets a few of the brains behind the ideas.

To remind Auckland of the fragility of its infrastructure, three sinkholes recently appeared in three months. The first, on Ponsonby's College Hill, was caused by a damaged stormwater pipe due for replacement. When more rain came, the road gave way. Then a second appeared in Ōtāhuhu. And, in September, a 13-metre deep sinkhole suddenly appeared in Parnell, sending raw sewage into Waitematā Harbour. Failing infrastructure reveals itself in unexpected ways.

While sinkholes are mild inconveniences compared with the impact of Cyclone Gabrielle and the Auckland Anniversary weekend floods, they highlight the need to urgently improve the resilience of New Zealand's infrastructure.

So, while political parties have been announcing plans to fix potholes, and build

new roads, bridges and tunnels as election selling points, the University of Auckland is undertaking wide-ranging research into the resilience of our built environment to protect it against everything from flooding to earthquakes.

Professor Liam Wotherspoon, from Civil and Environmental Engineering at the University, is involved in research looking at the resilience of infrastructure networks as part of the Resilience to Nature's Challenges National Science Challenge (resiliencechallenge.nz).

He says the sinkhole situation is complex.

"There could be different factors leading to the development of sinkholes like these. The pipes could be damaged by external factors, such as loading or movement of the surrounding ground. These pipes can also deteriorate over time and develop leaks, which allows water

The Auckland Anniversary weekend floods resulted in many landslides like this one at Massey in Auckland.

*Photo: Brett Phibbs/
New Zealand Herald*

to enter and weakens the structure of the surrounding soil. That can ultimately create voids not able to support the ground above the pipe, leading to a collapse and a sinkhole.”

He says to inspect every centimetre of pipe would be a massive operation. At any rate, the situation can change quickly.

“Pipe networks are regularly inspected by cameras moving through and looking for any signs of damage or deterioration. With thousands of kilometres of pipes to inspect, this is done in cycles across the networks. Where issues are found, action can be taken to remediate or replace the pipes.

“However, if the conditions change rapidly between the inspections, such as after intense rainfall, then damage and deterioration can accelerate. That means sinkholes can develop in areas where they were not expected, based on what inspection data had shown.”

He says increased water levels underground after Auckland’s sodden summer and wet winter mean sinkholes are always a risk.

THEN THERE ARE FAULTLINES

Lessons learned from the damage inflicted in the 2011 Canterbury earthquakes have permeated the country’s building sector.

Faculty of Engineering senior lecturer Dr Lucas Hogan has been at the forefront of informing changes to building practices and codes. As the winner of EQC’s 2023 Ivan Skinner Award, recognising excellence in earthquake engineering research, US-born Lucas chose the University of Auckland for his

postgraduate studies “because there are only a few places in the world that do good earthquake engineering work”.

Part of his research focuses on the resilience of bridges, and piers from the now demolished Whirokino Viaduct in the lower North Island are being tested to assess how a significant portion of New Zealand’s bridge network would perform in a quake.

“That’s useful for working with [New Zealand Transport Agency] Waka Kotahi,” says Lucas.

However, his research into the performance of pre-cast concrete panels and floors has had the greatest impact. By testing full-scale floors, Lucas and his research team gained a better understanding of the often-complex behaviour between the floors and the rest of the structure during an earthquake.

“I’m trying to understand the vulnerabilities in this construction type because of how ubiquitous this construction style is, but a lot of the detail has not been thought through.”

Describing New Zealand’s building code as “effectively just a big list of things not to do”, Lucas is gratified that his work has led to an update of both the New Zealand and US seismic assessment guidelines.

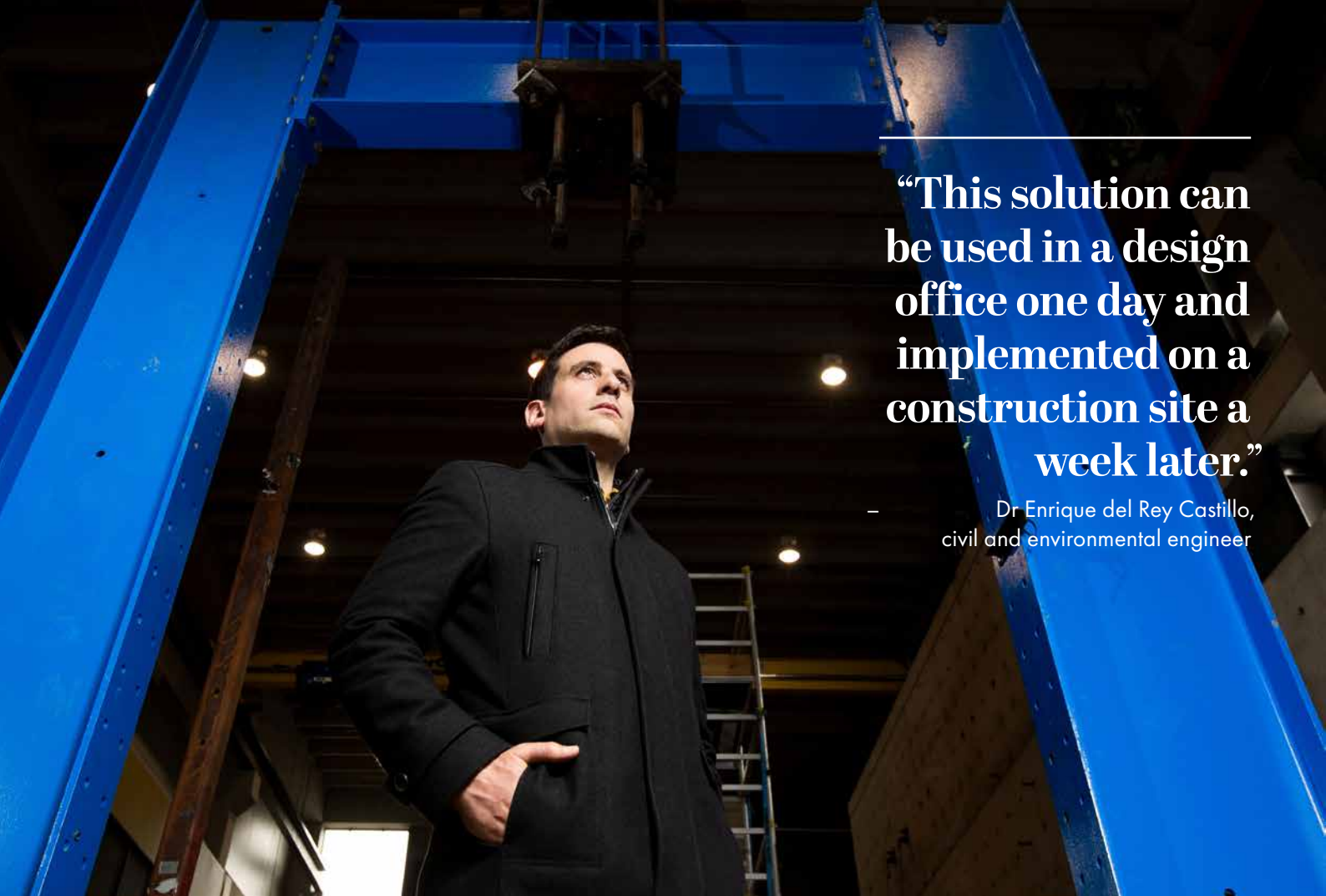
“You feel so much better that your work is actually getting used and making a difference.”

The aim is to increase resilience in the built environment by ensuring that structures damaged by quakes can be rebuilt faster.

“If there’s a risk to people, we want to make sure that we provide solutions that we know are going to work.”

Dr Lucas Hogan’s research includes looking at the resilience of bridges and piers. Photo: Chris Loufte





“This solution can be used in a design office one day and implemented on a construction site a week later.”

— Dr Enrique del Rey Castillo, civil and environmental engineer

Dr Enrique del Rey Castillo's research includes wrapping carbon fibre around weak spots in concrete columns and walls to improve resilience. Photo: Chris Loufte

WRAPPED WITH CARBON

Dr Enrique del Rey Castillo is another engineer dedicated to saving lives and preserving buildings. As part of his masters research, he explored Lisbon's unique 19th-century 'Gaioleiro' buildings, which were constructed with unreinforced masonry.

“I focused on how to assess heritage buildings, to make them stronger against earthquakes. I've continued looking at that because, by coincidence, those buildings and our buildings in New Zealand have the same problem – their floors cannot transfer tension forces.

“It's completely by chance because the two structural methods are separated by 200 years and thousands of kilometres, and don't even use the same materials – it's concrete versus bricks.”

Much of Enrique's work has involved the use of Fibre Reinforced Polymers (FRP) to strengthen high-rise buildings, such as wrapping carbon fibre around weak spots in concrete columns and walls.

“Concrete is very strong in compression and the carbon fibres are very strong in tension, so that works well,” he says.

Funded by EQC, Enrique and his team experimented with 56 different combinations of concrete, steel and carbon fibres to determine how and when they would fail. The deformation test results were much better than expected.

“The requirement by the building code is

2.5 percent lateral deformation, and we went to two times the requirement without failure.”

Discovering a cost-effective solution with immediate application was a major plus.

“This solution can be used in a design office one day and implemented on a construction site a week later,” says Enrique. “It can be used for a lot of things. It depends on the engineers' capabilities, skills and inventiveness.”

Among the buildings given a new lease of life through the use of FRP is the Category One Old Arts Building on the City Campus, the large stone-clad building alongside the University's ClockTower.

Enrique is now using a \$1 million MBIE Smart Ideas grant to investigate the more challenging issue of strengthening floors.

“Most buildings in Wellington older than 35 years are going to have this problem. Many people died in Christchurch partially because of buildings' poor floor connections, and there is no strengthening guidance for engineers.”

The research extends to collaborating with other universities, including Virginia Tech in the US, and with global companies including BBR Contech, Concrete Solutions and Simpson Strong-Tie – a subsidiary of the Nasdaq-listed Simpson Manufacturing Company.

“These collaborations have leveraged international R&D funding and ensure that the research is applicable in real-life engineering.”

SOCIAL INFRASTRUCTURE

The Canterbury earthquake, in which 185 died, is still being studied by academics in fields outside engineering, including sociologist Professor Steve Matthewman. He says while the reconstruction phase is important, social infrastructure is probably more important in terms of recovery and resilience.

“The more social capital you have, the more resilient you will be and the better placed you will be to cope with any disaster.”

Steve says that the Christchurch rebuild was a missed opportunity in terms of wholesale urban renewal, but some real positives have emerged, including the new Margaret Mahy playground and the public library Tūranga.

“They encourage social mixing of diverse people and hopefully build some level of understanding or tolerance towards others.”

‘Transitional urbanism’ was another feature of the Christchurch recovery. Community groups like Gap Filler, Life in Vacant Spaces and Greening the Rubble created open-air cinemas, built temporary stadiums to watch buildings being demolished and conducted guerrilla gardening on piles of rubble.

“It gets you out of the house,” says Steve. “It gets you into nature and connected with others.”

Consultation with the community is another critical element. “Part of being resilient is about having good mental health, good connections with your community and feeling you’ve been heard and listened to.”

He says the role of Ngāi Tahu in helping transform the city from one of the most English of colonial settlements into a more recognisably Māori place than central Auckland has been remarkable. “It’s the first time ever that a local Indigenous group has been an official party to recovery anywhere in the world following a major disaster. It’s massive.”

Supported by an \$870,000 Marsden grant, Steve is now collaborating with researchers from Lincoln and Canterbury universities to investigate the managed retreat from the city’s 600-hectare residential red zone, which is amongst the largest in the world.

“Ōtautahi Christchurch is a really interesting laboratory for an urbanising planet facing these unprecedented environmental pressures, including sea level rise.”

NO STRAIGHTFORWARD ANSWERS

Protecting the nation’s infrastructure from the ravages of extreme weather events and earthquakes is on the mind of Dr Conrad Zorn, a senior lecturer at the Department of Civil and Environmental Engineering.

“Our research is about how we can design robust assets more cost effectively.”

New Zealand’s location atop volcanic fields, with lots of low-lying land exposed to

sea swells and tsunamis, makes it a challenging environment. The country’s position at the juncture of the Pacific and Australian tectonic plates means it’s a geologically dynamic region affected by earthquakes, volcanic activity and other geological hazards.

One project, ‘Protecting Aotearoa New Zealand’s infrastructure from future damage and disruption’, is funded by a three-year grant from the Warwick and Judy Smith Engineering Endowment Fund, created after a generous \$11.1 million bequest from the Smiths in 2017.

Much of Conrad’s research collaborates with other universities and crown research institutes through client-side driven research consortia including the MBIE-funded Resilience to Nature’s Challenges, which aims to accelerate natural hazard resilience.

“When we’re trying to make New Zealand’s built environment more resilient, it’s important we’re on the same path,” he says. “And that, as a taxpayer, you’re getting far better value for money because there’s not duplicate research.”

Under Conrad’s supervision, research fellow Dr Amelia Lin is investigating seismic exposure and impact across New Zealand infrastructure networks using data from the Kaikōura earthquake to model the potential consequences.

“We can model a different earthquake, let’s say an Alpine Fault earthquake or Wellington Fault earthquake, and predict where it’s more likely a road blockage could occur,” says Amelia.

The impact of recent rain-triggered landslides is also being examined to calibrate and validate existing models. Conrad says, “Cyclone Gabrielle will be studied for years to come.”

The aim of the research is to be impactful and useful, but he says there’s no straightforward answer on how to make the country more resilient because “there’s much more to a resilient society than building the world’s strongest bridge”.

But becoming resilient doesn’t just apply to the buildings and structures we visit, owned by the

“The more social capital you have, the more resilient you will be.”

– Professor Steve Matthewman, sociologist, Faculty of Arts

Sociologist Professor Steve Matthewman says consultation with community is important in any reconstruction.
Photo: Chris Louffe





*Dr Karamia Müller says it's important to build research platforms for the types of graduates needed to confront housing challenges.
Photo: Chris Loufte*

“You can create intensification, but that’s not the same as creating community.”

– Dr Karamia Müller, co-director, Māori and Pacific Housing Research Centre

Crown, business, retail or universities. Housing resilience is critical for society. The University of Auckland’s Māori and Pacific Housing Research Centre (MĀPIHI), one of seven flagship research centres that were launched in 2022, is committed to improving the quality and supply of housing for Māori and Pacific communities.

That starts with impactful research.

“We’re invested in ways that our communities can tangibly engage and feel the material outcome,” says co-director Dr Karamia Müller.

Although in its startup phase, MĀPIHI has initiated a priority research cluster called ‘Where to live to thrive’ that is focused on mitigating climate change and natural disaster risks.

“Our communities know how to survive, but it’s time for them to thrive and to have housing that enables thriving,” says Karamia.

There’s excitement about the opportunity for wider university collaboration that will lead to deeper and more enduring research projects.

“It starts to build the research platform for the types of graduates needed for confronting some of these upcoming challenges.”

Rather than being typically deficit-based, the research is values-based, to reflect Māori and Pacific strengths and principles.

“It’s important that you’re researching to ensure that people feel good, and to uplift their mana,” says Karamia.

Initial consultation with stakeholders has produced more than 100 priority kaupapa (principles) for investigation, ranging from prevention of rheumatic heart disease to notions of place and whenua.

“We know you can build houses, but that’s not the same as building a home. You can create intensification, but that’s not the same as creating community,” says Karamia.

She says Māori and Pacific people faced a housing crisis long before there was a housing crisis for the whole country, and that housing security is a key issue.

“It can be the circuit breaker for intergenerational poverty, and this is something that’s top of mind for Māori and Pacific communities. How do we meaningfully address those cycles?”

SUSTAINABILITY AND WELL-BEING

Dr Tim Welch, co-director of the University of Auckland's Future Cities Research Hub, belongs to a transdisciplinary group of researchers trying to find innovative solutions that enhance sustainability and resilience – including in health and well-being.

“How do we contain our urban growth and make that growth the healthiest and best it can be?” asks Tim, whose focus is infrastructure and mobility. “How do we move people around cities and keep our urban systems functioning or working better?”

One project, funded by Waka Kotahi, is the creation of a micro-mobility hub at Auckland's Glen Eden rail station. E-bike and e-scooter rentals will be offered to typically car-centric commuters. It's a small thing compared to finding a healthy home, but is part of the wider focus to improve liveability in a city and reduce carbon emissions by “moving travel behaviour towards more sustainable modes of transport”.

In conjunction with Google Street View maps, Tim is also cataloguing Auckland's more than 6,000 bus stops to determine the availability of benches and shelters to evaluate how they might affect bus patronage.

For Tim, the Auckland Anniversary floods and Cyclone Gabrielle highlighted the city's reliance on “very old infrastructure”, which includes around 90,000 drain basins whose capacity over time has significantly diminished.

Rather than embark on an expensive modernisation of stormwater systems, he says there are many less-expensive options such as ‘daylighting’ underground streams to bring them above ground and “letting nature handle our flood waters”.

One example would be to excavate and restore the Tunamau Stream, which once flowed from Ponsonby through Freeman's Bay and into the Waitematā Harbour. It runs through a pipe that periodically floods Western Park during periods of high rainfall.

Ultimately, he says, it's about making the city more sustainable and resilient.

“We need to get people out of cars, moving around the city on trains or bikes and have cool urban spaces where water is managed and everything's not paved over.”

Dr Ferdinand Oswald is another member of the Future Cities Research Hub. He is an architect whose research on sustainability in the built environment has been heavily influenced by his father's role as an urban planner at Germany's Heidelberg City Council.

Having won a prized Green Building Award in 2011 for the design of Germany's largest passive house project, Ferdinand decided there had to be a better way to design houses, that doesn't involve gluing expanded polystyrene onto facades, which prevents recycling.



“More builders are using foams and glues to fix parts together, and these can't be recycled or reused after their lifetime because they can't be sorted separately.”

Among several waste-minimisation projects he's involved with is an update of a life-cycle assessment tool using precise waste data. This makes it easier for planners and architects to estimate – and be more aware of – the effect of building materials on the environment.

He emphasises the importance of considering waste minimisation during the construction phase as well as at the end of a building's life.

“We need to consider the whole life cycle of a building,” he says.

In some countries, the proportion of construction and demolition waste sent to landfills can reach up to 61 percent of the total waste.

Ferdinand says the best approach is to reuse building materials from deconstructed buildings to construct new ones.

Another project involves developing gradient concrete, which functions in a similar way to human bones.

“You can reduce the density in the middle, but at the edges you need more density because there's more load.”

As well as being 50-60 percent lighter, the production of concrete gradient panels results in a 45-60 percent reduction in carbon emissions compared with traditional concrete. Auckland iwi are also being consulted about the potential use of traditional cement ingredients such as pumice. “That's really exciting,” Ferdinand says.

Meanwhile, Tim is keen to reduce concrete production in other ways, certainly on the streets. He says to have fewer pavements and concrete driveways, and to develop floodable parks, could create a ‘sponge city’.

“It's a thousand little projects that add up to a huge boost to our resilience,” says Tim.

“These really don't cost that much.” ■

Dr Ferdinand Oswald is part of the University's Future Cities Research Hub and is interested in waste minimisation in building.
Photo: Chris Louffe

“Cyclone Gabrielle will be studied for years to come.”

– Dr Conrad Zorn, Faculty of Engineering

IN DEFENCE OF SOCIAL MEDIA

I read Alex Casey's previous guest column for *Ingenio* about the pure evil that is social media. I agreed with the bulk of it. We can talk about Instagram-induced social distancing and Twitter-X-fuelled brain rot until the cows come home. I, however, want to take a little opportunity to talk about a few pleasures that come from social media.

Obviously, I am biased on the topic. I have made a whole career out of the social media platforms Facebook and Instagram. I have, however, also been privy to the joy it brings others. By having a strong presence online, I have been able to have sell-out comedy performances around Aotearoa. As I write this, I am flying back from a show for 209 Invercargill residents. And it was such a darn beautiful experience! Having followed me online, the Invercargillians knew what comedy to expect and I knew exactly what to deliver. We laughed about Raro-drink-staining Tupperware jugs, we all chortled when I read some uncensored comments from the Invercargill City Council's Facebook page and we all guffawed about the time I sweated onto Katy Perry's face.

Afterwards, audience members came up and had selfies with me and told me their favourites of the characters/skits I have shared online. There's no way around it; it was a glorious communal experience.

And it was all thanks to social media.

In terms of my own viewing habits, I have definitely been plunged into body self-hatred when I fell into an algorithm of male model 'Reels', but the amount of joy I've experienced from comedians' pages, cats-being-mental pages, dogs-doing-zoomies pages, interesting art pages, international cooking pages and people-experiencing-exotic-fruits pages far outweigh the negatives. I have learnt so much about Renaissance art, what snake fruit looks like and how it tastes, how cucumbers are prepared around the world, how emus run, and the history of Iceland in one minute. My curiosity is fed; I laugh; I learn so much.

And it's all thanks to social media.

Social media, of course, completely divides us. It will be our great undoing. But I have to say I feel I've grown more compassionate as well. I follow an American 'disability mom' called Anna. She's a devout Christian with four children. Her youngest has a physical disability where her skull is too small for her brain and needs to be surgically enlarged throughout her growing years. On paper, this Tennessee-living, anti-choice, gun-toting Republican would make my eyes roll and blood boil. But I now feel like I know this woman; I've seen her struggles so intimately. And I love her. And if I were to meet someone similar in real life, I would be much less quick to judge. I'm also so much more clued up on people living with disability (and those who care for them) that I'll interact with them with much greater understanding.

And that's all thanks to social media.

I also follow an ethereal Chinese woman who shows you how to make traditional Chinese food. I follow a Middle Eastern man and his friendship with his manic chihuahua. I follow an African-American woman and her addictive content about how to style and wear very convincing wigs. None of these people could ever have their own television show, but they're sharing their fascinating skills and stories on the only platform accessible to them, and I'm lucky enough to be their audience.

And we can thank social media for that.

And then, of course, there are your friends creating personal posts. It's sad to me that barely anyone I know does it any more. I still have a few friends who post about their lives, though. And ... I love it. We all lead such busy lives that having a physical meet-up can be nigh on impossible. But I feel I still have a wee link to these people where I enjoy their embarrassing confessionals, celebrate their successes and help them when they're 'looking for someone to sublease my room while I travel around Europe'. And I'm curious. I get real joy out of seeing how my old schoolfriends are living their lives.

So yes, social media sucks. Teenage girls suffer terribly because of it. Bullying is rife. But it isn't so black and white. There are so many aspects of it I absolutely love. Doom-scrolling from 3am to 7am isn't part of that, but watching a 50-second video about how to grow and prepare pink pineapples in the Philippines is.



Comedian Tom Sainsbury has a BA in Media, Film and Television Studies from the University. His new book is called *New Zealanders: The Field Guide* (HarperCollins NZ). See tomsainsbury.com
Photo: Andi Crown

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

AHEAD OF THE GAME

James Fyfe profiles brain researcher Dr Helen Murray, whose work investigates the risks of high-impact sport to players' brain health.

As both a neuroanatomist and longtime member of the New Zealand women's ice hockey team, Dr Helen Murray says it's important contact-sport athletes know how to keep their brain healthy.

Helen, who is based in the Centre for Brain Research (CBR), is one of the country's leading experts on chronic traumatic encephalopathy (CTE), a form of dementia associated with repetitive head injury. Although CTE can be categorically diagnosed only after death, neurologists can give a 'probable' CTE diagnosis while people are alive, using an informed process of elimination. The disease has received greater public attention in recent years as former professional sportspeople with probable CTE, such as ex-All Black Carl Hayman, have spoken out about the toll their sports careers have taken on their health.

Helen hopes her research will one day help athletes detect changes in their brain health much earlier in their careers, helping to prevent long-term damage.

She has played for the Ice Fernz ice hockey team since 2013, captaining the side from 2016 to 2022 and also represented New Zealand in inline hockey. Helen has seen many teammates suffer concussions and has also experienced her own share of knocks to the head, including a mild concussion this year.

But CTE is not only caused by concussion. Even seemingly minor collisions can cause a violent movement of the brain, creating microscopic damage to brain tissue that accumulates over time.

Helen's research involves examining the brains of past contact-sport athletes that have been donated to the Neurological Foundation Human Brain Bank at the CBR. She uses a novel method of tissue labelling that she developed during a postdoctoral fellowship at the National Institutes of Health in Washington, DC. Using fluorescent tags, she can label up to 100 proteins on the same slice of tissue, providing 20 times more information than traditional methods. The goal is to find biomarkers – biological molecules that indicate damage has occurred in the brain. One day these biomarkers could be measured with a blood test to help identify if an athlete has



Research profile

Dr Helen Murray says there are cumulative risks to bangs to the brain.
Photo: Chris Loufte

accumulated too much damage to their brain.

"It means we could identify when people are having brain changes before their symptoms start," Helen says.

"That's really important because that's the window where we might be able to intervene."

Helen says she has always been aware of the risks involved with repetitive head injuries in contact sport and never takes her brain for granted.

"I've always had the mindset that my brain is precious and have wanted to protect it – so I play in a way in which I try to limit collisions."

However one thing that's changed as a result of her research is that she ensures she gives herself time to recover properly after taking any knocks to the head and won't "push myself to go back too quickly".

"It has made me more cautious about that, but it hasn't made me want to stop playing."

Helen hopes further research into CTE will allow athletes to make informed decisions about how they play and take time to recover from head injuries.

"If you have the knowledge that your brain isn't coping, then you have the power to change it."

"I've always had the mindset that my brain is precious and have wanted to protect it."

– Dr Helen Murray,
Centre for Brain
Research



SUPPORT BRAIN RESEARCH

Find out how you can support Dr Helen Murray's ground-breaking research on Chronic Traumatic Encephalopathy. See giving.auckland.ac.nz/CTE



Helen Murray in action for the Ice Fernz. Photo: Elvar Freyr Palsson

EYE DROPS MAY REPLACE GLASSES

Breakthrough treatment may see no need for reading glasses

A revolutionary eye treatment in the United States, where eye drops are being used to replace reading glasses, is now being tested in this country.



Vuity eye drops were approved by the US Food and Drug Administration (FDA) in late 2021 for prescription-only use for presbyopia, which is age-related decline in near vision.

Now the drops are being trialled in New Zealand by Dr Alyssa Lie, optometrist and research fellow in physiology at the University of Auckland.

Alyssa is primarily researching whether the eye drops are as effective as claimed, bearing in mind the research in the US was conducted by the manufacturer, so could be perceived as conflicted.

“The Vuity drops work by constricting the pupil so that you get increased depth of focus and should theoretically be able to read up close without needing your reading glasses,” she says.

She is also testing how the agent in the drops, pilocarpine, affects the eye at a molecular level. Pilocarpine is already used to treat glaucoma and is Medsafe approved.

If her study confirms the efficacy of Vuity, it could expedite approval for the use of the eye drops in New Zealand.

Alyssa expects to have findings by the end of the year.

Full story: auckland.ac.nz/eye-drops-for-glasses

Left: Dr Alyssa Lie is running trials with the eye drops to test their claimed efficacy.
Photo: Chris Loufte

FACT-FINDING ON THE ROOF

Two projects are using high points as the location for research

Asthma and allergy researchers have installed a pollen trap on the roof of Auckland Museum to provide up-to-date data on allergenic pollen in the air. The metallic pollen trap allows the researchers to gather near-real-time data on the pollen and spores that can trigger a range of allergic reactions. Public information is currently modelled on trends detected decades ago and the likelihood of certain pollens being in the air.

“We don’t have recent data that tells us about how these pollen triggers may have changed in recent decades in response to changes in climate, land use and vegetation patterns,” says Dr Amy Chan, a pharmacist and asthma researcher in the Faculty of Medical and Health Sciences. She’s working with Dr Stuti Misra, an optometrist and scientist at the University, alongside other researchers including from Massey and Victoria universities. They will clear the pollen from sticky tape on the trap once a week for the project.

Meanwhile, a project to show the benefits of ‘living’ roofs is sprouting at the Faculty of Engineering. Hundreds of plants will transform the rooftop of an Engineering building as part of a trial relating to the uptake of green roofs in New Zealand. Research lead, Associate Professor Asaad Shamseldin, says more planting is vital to help reduce the impact of weather events like Cyclone Gabrielle. The project is a collaboration with Auckland Council to understand the benefits that living roofs can provide compared with conventional roofs.

Full stories: auckland.ac.nz/pollen-trap-roof and auckland.ac.nz/green-roofs

From left: Dr Stuti Misra, Dr Amy Chan and Natasha Ngadi from the University, check the pollen trap.
Photo: William Chea



NO SUCH THING AS WINE WASTE

Grape waste could be made into useful plant-based chemicals

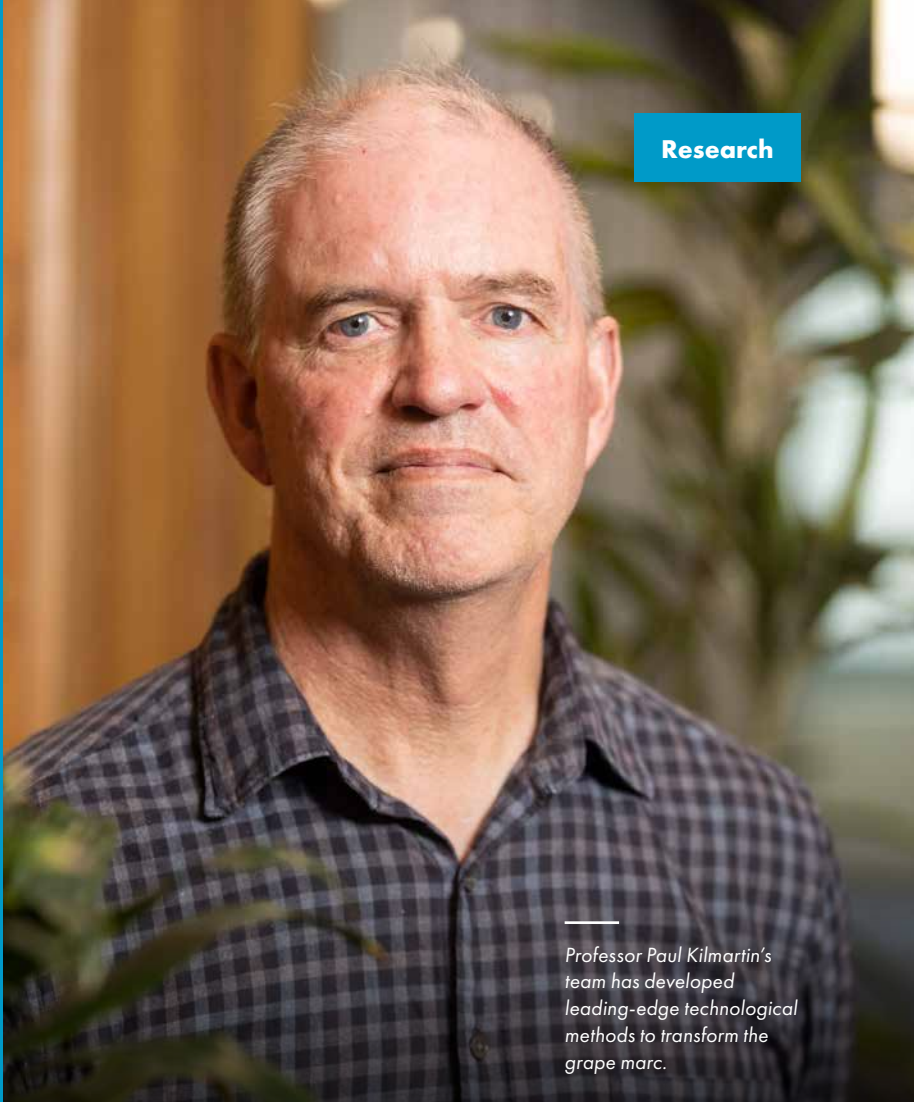
Waste from our wine industry could be transformed into useful products in a \$9.8m project led by the University.

Grape marc is the stems, skins and seeds left over from winemaking. It's often composted or disposed into landfill, and can leach into waterways. The plan is to biorefine it into food, pharmaceutical and chemical products such as phosphorus, plant-based proteins or surfactants.

Professor Paul Kilmartin, a wine chemist who set up the Wine Science programme now on Waiheke, will lead the research. The project was awarded the funding by the Ministry of Business, Innovation and Employment's Endeavour Fund.

New Zealand produces around 50,000 tonnes of grape marc a year. "It's being wasted," says Paul. "But it could be a significant resource. If we get this model work done, other horticultural industries could take up aspects of it as well."

Full story: auckland.ac.nz/wine-waste



Professor Paul Kilmartin's team has developed leading-edge technological methods to transform the grape marc.

WAR ON FOREVER CHEMICALS

Centre for Green Chemical Science offers hope for global clean-up

Dangerous 'forever chemicals' left in the soil from firefighting foam could be destroyed by grinding, according to a proof-of-concept study by University of Auckland scientists collaborating with the US Environmental Protection Agency (EPA).

'Ball milling' – intense grinding by metal balls at extremely high speed – appears viable for decontaminating soil from military bases, airports and refineries around the world where the foam was used for decades, according to the University and Environmental Decontamination (NZ) Limited (EDL).

Contaminant chemicals from the foam, called PFAs, don't break down naturally and have been linked to cancers, reduced fertility, liver damage and other adverse health effects.

Ball milling in a University of Auckland chemistry laboratory destroyed almost 100 percent of the chemicals in soil from a

decommissioned Defence Force firefighting training site and in firefighting foam. Dr Kapish Gobindlal, an honorary academic at the University and the chief scientist for EDL, says their tests resulted in a safe by-product.

Published in the journal *Environmental Science: Advances*, the research was by Kapish and his PhD supervisors, Professor Jon Sperry and Dr Cameron Weber, of the Centre for Green Chemical Science, collaborating with scientists from the US EPA.

Full story: auckland.ac.nz/forever-chemicals

Dr Kapish Gobindlal says the method can be scaled up faster and cheaper than the alternatives.



WHAT'S NORMAL?

Experts ask whether there's such a thing



Dr Jude MacArthur specialises in inclusive education and disability policy and teaches postgraduate programmes in these areas.

Photo: Chris Loufte

Is the education system inclusive when it comes to neurodiversity? Denise Montgomery talks to educators, advisers and a doctoral student about what inclusive education means and why neurodiversity isn't 'abnormal'.

Paradigm is a fancy word to describe a way of observing the world. When a particular way of viewing things has become accepted wisdom, it can be hard to shift to a new way of thinking. Yet that is exactly the goal educators are seeking – a paradigm shift that ensures all students can succeed in our education system.

Dr Jude MacArthur is a senior lecturer in the Faculty of Education and Social Work (EDSW). Her speciality is inclusive education and disability policy. When she was a student, the dominant thinking around neurodiversity came from the 'pathology paradigm' – students were viewed as abnormal and were categorised using labels such as attention deficit hyperactivity disorder (ADHD), autism spectrum disorder (ASD), dyslexia and dyscalculia (a learning disorder that affects ability to do maths).

"It was deficit-oriented, based on the idea that we need to fix these broken kids to make them 'more normal'," says Jude. "Thankfully, it was the autistic community itself that questioned that and said, 'We're not broken, we are who we are. The responsibility is not on us to become some kind of normal, whatever that is.'"

Inclusive education embraces the neurodiversity paradigm, a more nuanced and equitable approach, that reframes what was once a 'pathology' to a valued aspect of human diversity.

"This paradigm challenges the idea that anyone who is neurodivergent is abnormal and we require them to be fixed to be more 'normal' and to fit into our education system," says Jude.

"That's an old way of thinking. We can value neurodiversity as an aspect of human diversity that we expect, that we see in our communities. We made up this idea that there was a thing called normal and anyone who sits outside of that is considered abnormal."

That puts the responsibility right back on society to understand and adapt. Take, as an example, an autistic child very focused on one subject, such as spaceships, perhaps to the point where others might describe it as an obsession.

"We used to think that autistic kids focusing on one topic all the time was a problem. That's how it was under the pathology paradigm. But now we'd say, 'Isn't that great? It's a strength.' A teacher might then set a lesson or module that includes everyone and it's all about spaceships."

"We made up this idea that there was a thing called normal."

– Dr Jude MacArthur,
Faculty of
Education and
Social Work

Jude isn't denying there can be challenges for neurodivergent children in the classroom – they can be sensitive to noise or light, and feelings of being overwhelmed may manifest in their behaviour.

“As a teacher, I have a puzzle in front of me. The problem is not in the child, but the context. What do we need to change to ensure that child is able to learn well and have a sense of belonging?”

SCANNING THE BRAIN

Professor Karen Waldie approaches the subject as a neuroscientist at the School of Psychology and the Centre for Brain Research. She says an estimated one in ten New Zealanders has some form of neurodivergent thinking and behaviour. Her research explores ADHD, ASD, dyslexia and dyscalculia.

“Many people don't realise the amount of variation there is in the human brain. It's not that neurodiverse children are 'abnormal'. They simply have a harder time with traditional Western education.”

Karen's research looks at the cognitive and biological markers of conditions like ADHD.

“Almost all neurodiversities are highly heritable,” she says. “We just have to look in the family tree for parents, siblings and grandparents who may have struggled in education and there's a good chance other members of the family do too.”

Karen's dyslexia research shows that while it is common to use the 'verbal' left side of our brain to understand words, “dyslexic people use the 'pictorial' right side – making them slower to process and understand language, but stronger in creative areas like problem solving, empathy and lateral thinking”.

“When I arrived in New Zealand from Canada more than 20 years ago, I was shocked there wasn't support for dyslexic children, and dyslexia wasn't recognised as a condition.”

Karen received Faculty of Science and philanthropic funding to carry out a study, which showed brain-based differences between neurotypicals and those with dyslexia. The brain scans helped the Ministry of Education formally recognise dyslexia in 2007.

Now she's involved in an ADHD study using functional Magnetic Resonance Imaging, which reveals activity in the brain when people perform mental tasks. This interdisciplinary work is being carried out using high-tech brain-imaging facilities at Mātai Medical Research Institute in Gisborne, with the help of physicist Associate Professor Samantha Holdsworth, Associate Professor Justin Fernandez from Engineering and three doctoral students.

“Preliminary research shows that while neurotypical people show specific areas of brain activity when at rest versus performing

a task, neurodiverse people do not show this uncoupling. Interestingly, their frontal lobes normalise when they fidget.”

That means fidgeting is not only normal for children with ADHD, but it's also good. However, it doesn't always go down well in a learning environment where sitting still and paying attention are valued behaviours.

“But if we consider education from about 200 years ago, these kids wouldn't have been considered to have a problem because there was little in the way of universal education or literacy standards.”

Back then, children also learned about life's more practical aspects and may have left school early. A summer scholarship undertaken by Bachelor of Education student Katie Lilburne in 2022 uncovered evidence of how past education curricula may inadvertently have provided more options to suit neurodivergent students.

“There was a practical aspect to schooling in the early 20th century,” says Katie. “Lessons were designed specifically to develop real-life skills for their roles after they finished school ... These included social studies lessons on the political system and voting, economics lessons on mortgages, interest rates and taxes, lessons on seed raising and animal rearing and, for girls, home craft lessons on laundry, needlework and how to decorate a home.”

Karen adds: “In the industrial age, kids were working in shops or on farms. Just because we have reformed our education system, you can't expect our brains to have evolved that much.”

She hopes we can eventually understand the underlying causes of neurodevelopmental differences. That may require a combination of neuroimaging research, genetic research and life-course data from multiple national longitudinal studies including the country's largest, Growing Up in New Zealand (GUiNZ), which Karen has worked on since its inception.

Using its data, Karen is also researching the predictors of child depression, funded by the Royal Society Te Aparangi.

“Our research has found there's an increased likelihood that neurodiverse kids will develop a mental health concern.”

Early assessment is important because

“Just because we have reformed our education system, you can't expect our brains to have evolved that much.”

– Professor Karen Waldie, neuroscientist

Professor Karen Waldie is working on a project that scans the brains of neurodivergent people. Photo: Elise Manahan





Glenis Wong-Toi and Jodie Peterson work in the Inclusive Learning team at the University, which offers support and advice to neurodivergent students. Photo: Chris Loufte

“The first step is to create trust and a perception among your students that they could contact you.”

– Jodie Peterson, adviser, University of Auckland Inclusive Learning team

◀ intervention is key to warding off anxiety and depression. The ministry has a free early intervention service for families of young children with learning support needs.

“It’s also important that teachers have a good knowledge of dyslexia as well as ADHD, ASD and dyscalculia,” says Karen.

In the end, she says an education system that fails to understand these children doesn’t give neurodivergent learners a fighting chance to be their best. “It fails to acknowledge that neurodiversity is good,” she says. “It’s what keeps our species so successful.”

CHANGING THE SYSTEM

Jude knows the challenges teachers face teaching different styles of learners, having been a primary school teacher prior to her academic career. “One of the biggest resources that teachers need, that they don’t have, is time. They need non-contact time to collaborate and share information ... to learn from other educators, specialists and the child’s family.”

Big class sizes are also an issue – bad for teachers as well as children. “Under the UN

Convention on the Rights of Persons with Disabilities, we have obligations to shift money from segregated settings into the development of inclusive school communities. I’m not sure we’re doing that very well.”

Since 1989, New Zealand’s school system has been ‘mainstreaming’ students.

“With mainstreaming, we’d see disabled kids in our communities head off to the local school,” says Jude. “But there was a lot of ‘You can come to our school now, but don’t expect us to change to accommodate you.’”

Special Education 2000 arrived in 1995 and began funding resources for children with learning, communication and behavioural needs. In 2002, Special Education Services was set up, integrated into the ministry.

Jude says there is a raft of Ministry of Education policies supporting inclusive education, and the Education and Training Act 2020 outlines teachers’ obligations.

With the New Zealand Curriculum Refresh under way, there are opportunities for improvement.

“One of the foundation principles of that is inclusion,” says Jude, who adds that many schools are already doing a good job.

“But we need to ensure the curriculum is written for every single student.”

EDSW offers postgraduate study in inclusive education specialisation and, at undergraduate level, teachers are being equipped with learning to reflect the neurodiversity paradigm.

Jude says a critical starting point is that education should be accessible to everybody.

“How do we make everywhere, from our early childhood centres to university, good places for every student?”

“Do we believe in the open-ended potential of every child to learn? It’s about designing teaching experiences, and looking to remove potential barriers, so every child in our classroom feels good about themselves.

“Nothing should prevent anyone from engaging in education. It’s a human right.”

SUPPORT AVAILABLE

At the University of Auckland, advisers in Inclusive Learning, including Jodie Peterson and Glenis Wong-Toi, work with neurodivergent students during their tertiary study.

“Students may have a diagnosis of autism, ADHD, dyslexia, or even a temporary neurodivergence,” says Jodie. “We may see traumatic brain injuries, chronic fatigue or other conditions that affect attention and focus. Our purpose is to support students to be academically successful and to maintain their well-being.

“Students who have a diagnosis and can produce documentation have access to a full suite of support. That includes special conditions and access to protected spaces, groups

and workshops. Students on the pathway to diagnosis can receive one-on-one support and access to online resources we've created."

Glenis says students can contact the Inclusive Learning advisers any time during their degree.

"They may have had comments or feedback about their work or assignments," she says. "Or they may be putting in a lot of effort, but not getting results. They can talk to us about what might be going on and see how we can help."

The Inclusive Learning team has also developed a pilot for secondary schools to support students' transition to university life.

Jodie says if there's one piece of advice she would give to university educators, it would be to create a learning environment that is open and inclusive for neurodivergent students.

"Are you using language that makes neurodiverse people feel safe? Would they feel okay coming to you and saying 'I'm having difficulties'? The first step is to create trust and a perception among your students that they could contact you if needed."

She suggests telling the class, "If you experience learning in a different way, or absorb information in a different way to how I'm teaching and you'd like to discuss that, I'm really open and flexible. And, if you would like additional support, please come and see me."

THINKING ABOUT VALUES

Educators and teachers are often at the forefront of change in society.

"But we live in a society that's ableist and consistently engages in 'deficit theories' around disability," says Jude. "Teachers need to think about their values and how they behave when they know a person may be neurodivergent."

She and close colleague Missy Morton, Professor of Disability Studies and Inclusive Education, use the word 'disability' precisely.

"We draw on disability studies as a disciplinary field," says Jude. "It informs our teaching and research. That means using the social model of disability ... it firmly establishes disability as a consequence of living in a society that isn't designed with every person in mind.

"You 'experience disability', for example, if you attend an early childhood centre or school that's designed with a socially constructed idea of 'normal' in mind as the preferred way to be."

She says in taking this approach, the term 'disabled children' emphasises two things.

"One is the idea of children being disabled by the context in which they live and learn ... a society not designed for all.

"The second comes from an international disabled people's movement. Disability has been adopted by some groups as a label of pride and recognition. They're saying, 'Yes, I am a disabled person and I proudly own that; it's a positive part of my identity.'" ■

JULES' STORY

During high school, Jules Skelling was stood down five times in two years. In Year 13, her attendance was just 30 percent. Dealing with severe ADHD, Jules was labelled unteachable, yet she excelled academically through self-guided learning at home. This was preferable to being confined to the 'adjustment room', a windowless segregated space, or working in the accelerated class referred to by peers as the 'freaky class'.

Jules reflects on the language used then, highlighting that the 'adjustment room' concept, intended to modify behaviour, would be considered illegal nowadays.

Despite her challenges, Jules qualified for university and now, as well as working on her PhD in education, she teaches at an Auckland secondary school, including learner support.

Jules acknowledges that some people with ADHD claim the term 'disability' as part of their identity but she doesn't. She also grapples with the concept of advocacy on her behalf, asserting her ability to speak for herself. Her experience has involved marginalisation and dealing with ableist attitudes.

Jules' university education unveiled the pivotal role of Inclusive Learning advisers like Jodie Peterson. Although Jules excelled at undergraduate level, she encountered difficulties while trying to write her masters thesis after completing data collection because of the lack of structure. "I lost my way. I disappeared. My emails piled up. I had multiple drafts sitting there I couldn't send. I didn't know how to share what I was experiencing, so communication with my supervisor stopped."

Until that point, Jules hadn't disclosed her unique thinking process to her supervisors. And though not particularly fond of the term 'neurodivergent', she recognised the need to become more open and 'supervisable'. After six months, she contacted the Inclusive Learning team for help. Jodie became a valuable support, providing bullet-point emails and summaries of their discussions. This method helped Jules' busy mind focus.

Jules embraces the way her mind works and how she learns new skills quickly. "If I didn't have ADHD, my life wouldn't be as full. I wouldn't do half the things I do if I wasn't impulsive."

But during the stressful thesis period, a piece of advice from Jodie resonated. "Jodie said, 'You're imagining what your supervisors are thinking and worrying you're going to disappoint someone. She firmly told me, 'You are freaking out, but to them it's just Thursday.'"

Jules says this liberated her from paralysis induced by fear of disappointing others, and still has the advice written down.

These days, she draws on her personal experiences to connect with her students.

"No one knows what's happening in your head with these 'invisible disabilities' as people might call them. But I know what it feels like to get a sense you don't quite fit in."



Jules Skelling has severe ADHD. She is doing her PhD and teaching at an Auckland secondary school. Photo: Chris Loufte

BLOCKBUSTER BRAINWAVE

Movie-review platform Letterboxd, devised by two computer science alumni, is a smash hit and set to grow. Donna Chisholm meets its creators.

Matthew Buchanan and Karl von Randow created Letterboxd, now a household name in Hollywood.
Photo: Renee Bevan

“We have Tom Cruise talking to our microphone and Barbie director Greta Gerwig sitting down with our team.”

– Karl von Randow, co-creator, Letterboxd

When Letterboxd, then a fledgling website for film buffs, was a dollar-draining labour of love, developers Matthew Buchanan and Karl von Randow added a tagline to explain it, saying it was: ‘Goodreads for movies’.

Fast forward a decade and the University of Auckland computer science alumni are only half-joking when they suggest the behemoth book site Goodreads – which sold to Amazon in 2013 for a reported \$US150 million – might now consider rebranding itself ‘Letterboxd for books’.

When Covid-19 brought the global economy to its knees, the pandemic turbo-charged the Letterboxd app and social media network, lifting it from 1.8 million users in 2020 to about ten million today. Around four percent of active users are paid subscribers, and more than half of those are 18 to 34. A stonking 80 percent are under 45. In 2021, *The New York Times* said its success was proof of a thriving film culture.

Before this, the platform they launched in 2011 had sucked ‘millions’ from their web and app design business Cactuslab – Letterboxd didn’t start making money until 2019. But when Covid hit, it was the social connection that couch-bound film fans craved.

“We paid ourselves nothing for years,” says Karl. “We were subsidising its development by using people from our agency business. We wanted to take on less work at the agency to free up people to spend time building Letterboxd.”

They hired their first full-time employee, editor-in-chief Gemma Gracewood as Covid hit, and now have 16 full-time staff and around eight part-timers in New Zealand and the US.

Matthew began his computer science degree in 1991 when the web was in its infancy, and recalls most computer conversations with movie buffs at the time were in text-based chatrooms.

“One I frequented was rec.arts.movies where a guy called Colin Needham was hanging out. He’d publish lists of actors and every film they’d ever been in.”

Needham went on to found IMDb, the pre-eminent source of movie data, now with more

than 80 million users. But the site lacks the social following and engagement of Letterboxd. Within three weeks of the launch of blockbuster *Barbie* in July, for example, nearly 1.2 million Letterboxd users had rated the movie – six times the number on IMDb.

When Matthew built his first website – for the All Blacks – in 1994, it was among the first on the internet in New Zealand. He and Karl, who began his degree when Matthew was finishing his, met when they worked at a Parnell web design company, and set up Cactuslab in 2001.

Letterboxd is now a big name in Hollywood. In a collaboration with the Oscars in 2023, it compiled a “love letters from Letterboxd” reel of user reviews read out by nominees. Letterboxd staff also met with director Guillermo del Toro.

“He wanted to know how it works, how people get popular on it and why it doesn’t suck like X.”

Last year, multi-award-winning actress Anne Hathaway recorded a birthday message for Matthew during an interview with the team. Even *Barbie* star Margot Robbie is rumoured to have a Letterboxd account. Of course, Karl and Matthew couldn’t possibly say.

“Roll back two years,” says Karl, “No one was talking to us. Partnering with the Oscars? We’d be dreaming. Now we have Tom Cruise talking to our microphone and *Barbie* director Greta Gerwig meeting with our team for 20 minutes.”

As the site’s celebrity status rose, so did questions of it attracting a buyer. Earlier in the year Matthew said they wouldn’t sell to the likes of Elon Musk, who shelled out \$US44 billion for Twitter. “We can absolutely assure you we will not sell anything to Elon Musk.”

But later in the year, they didn’t need to consider a big buyout by Musk – they opted for a Tiny one. In September, Canadian technology firm Tiny purchased a 60 percent share of Letterboxd in a deal that valued the company at \$83 million. Matthew and Karl are stoked.

Says Karl: “Tiny understands what makes Letterboxd special, loves our vision for growth, and shares our respect for our amazing community. We’ll grow from here.”

AFGHANISTAN TO AUCKLAND: MOVE FOR FREEDOM

When the Taliban took control of Afghanistan, women pursuing education or careers, like Judge Raihana Attaee, had no choice but to go into hiding. By Janet McAllister

A year ago, *Ingenio* carried the astounding story of how the International Association of Women Judges, led by New Zealand Justice Dame Susan Glazebrook, helped some 200 women judges to escape Afghanistan after the Taliban reached Kabul in August 2021.

Six judges resettled in Aotearoa New Zealand, including Raihana Attaee, who had been the only woman judge at the Nangarhar province Court of Elimination of Violence Against Women, despite being a member of the oppressed Hazara ethnicity. Now, having brushed up her school-learned English, the softly spoken 33-year-old is relieved to be retraining in New Zealand law at the University of Auckland, learning the differences between Afghanistan's civil law system and our common law.

"When you come to a new country, it is like starting from zero, your mind is empty of any facts about your new home," she explains.

"And when you start studying the facts about your new country, it gives you a sense of understanding and belonging. I am happy."

In the harrowing months before she and her husband Maqsood Rezayee escaped from Afghanistan, they were in hiding with their toddler son, virtually imprisoned but always on the move. Raihana believed either the Taliban or any prisoner they released "would find me and kill me very soon," she wrote for the 2022 *NZ Women's Law Journal*. She received threatening phone calls from a dangerous criminal she had sentenced to 20 years in prison for killing his wife.

"I was regretting being a mother ... my child was being punished because of his mother's job."

One night, Maqsood's mother Adila saved the family hiding in her house by telling Taliban searchers they couldn't come in as no man was present. The family had to flee at midnight, with no money. Raihana messaged Dame Susan's group, who found them a restful safe house for 20 days, a charter flight to Greece, and ultimately visas to Auckland, including for Adila, and Maqsood's sister.

Raihana says Dame Susan was "incredible"



Profile

throughout – replying reassuringly to many judges' desperate messages even though, Raihana now knows, their daytime messages must have reached the judge during the night.

Raihana knew very little about New Zealand but, serendipitously, just before the Taliban takeover, Maqsood had begun studying remotely towards a doctorate in urban planning at the University of Auckland after he received the Philip Deibert PhD Scholarship in Planning.

The family is now settling in well, pleased to find other Hazara people here. Raihana's preschooler son likes kindy, and his grandmother looks after him when his parents are studying. Raihana's interest in gender violence prevention continues, although she's not yet sure what her law speciality here will be.

Sadly, Raihana's inspirational, supportive father died in Afghanistan this year.

"Even when I moved to New Zealand, he always called me and said, 'Continue! Go to university, you can build your life there,'" she says.

She remembers him as a remarkable and brave community leader, striving to protect their village from Taliban interference in the 1990s and, once the Taliban were deposed, travelling to Kabul to successfully lobby the new government for a village school, for both girls and boys.

Changes in Afghan politics and society can be traced in the lives of Raihana and her six siblings: one brother is a medical specialist still in Afghanistan; a dentist sister escaped to Pakistan, then Iran, and hopes to join her partner in Australia; and Raihana's oldest sister is illiterate, like their mother. Raihana's nieces in Afghanistan are educated – but their past opportunities have now disappeared.

As a small child, Raihana thought village life was her destiny. But her father had a different message.

"He said, 'If you study, you will be different. Knowledge is power.'"

Judge Raihana Attaee is retraining in law at the University. Photo: Chris Louffe

"When you come to a new country, it is like starting from zero."

– Raihana Attaee, former judge in Afghanistan, Auckland Law student

THE GREAT BALANCING ACT:

Tourism and sustainability

Now that the country's borders are flowing freely, could we make greater efforts to reset tourism so it has a sustainable heart?

The cruise ships are back, along with the backpackers and campervans. According to the Ministry of Business, Innovation and Employment (MBIE), tourism is expected to bring a much-needed \$15 billion to the economy in 2024, up 40 percent on 2017. Visitor arrivals are tipped to grow 4.8 percent a year from 2023 to reach just over five million in 2024.

Those tourist dollars are important, but so is the way we earn them.

More than 50 cruise ships are expected this season, bringing around 350,000 passengers to our ports. While those cruisers will likely bring more than \$500 million to the economy, there's a flipside.

Professor of Development Studies Andreas Neef is the author of *Tourism, Land Grabs and Displacement: The Darker Side of the Feel-Good Industry*. "We need to consider the environmental and health impacts of the cruise ship industry, which was a substantial pillar of our tourism economy pre-Covid and has seen a resurgence since late 2022."

He says New Zealand regulators have focused on biosecurity threats, such as sea snails and barnacles, arriving on cruise ship hulls, with little attention paid to dangerous sulphur oxide emissions from each ship.

"These put stress on our under-threat marine taonga, such as the Hauraki Gulf."

Pre-pandemic, in 2019, the government introduced a \$35 international visitor

conservation and tourism levy (IVL). Most international visitors pay it, except for those from Australia and the Pacific. As well as other measures, Andreas believes the IVL should be increased to support a greater number of sustainable tourism and conservation projects.

Associate Professor Dan Hikuroa (Ngāti Maniapoto, Waikato-Tainui, Ngāti Whanaunga) is an earth systems scientist in the Faculty of Arts with a PhD in geology, who is best known for his research into the state of Aotearoa's rivers. He also serves on the Waitomo Caves management committee for his hapū.

"Tourism can be good for operators and for tourists, but we need to ensure our tourism options are also right for communities and for the taiao (environment)."

Dan says research shows that tourism can't be separated from the environmental, social and cultural needs of communities. Incorporating diverse cultural values into the sector is vital for an equitable future for the industry.

"It will lead to positive experiences for tourism providers, travellers and locals."

He draws on the concept of the 'economy of mana' proposed by Dr Kiri Dell (Ngāti Porou) and colleagues in the Faculty of Business and Economics. Its principles include "increasing the collective good and intergenerational long-term outlooks". Looking at how the tourism economy works as a whole, the economy of mana also focuses on interacting "with the four well-beings – spiritual, ecological, kinship and economic".



"Principles of an 'economy of mana' align with the tourism criteria we need."

– Associate Professor Dan Hikuroa, earth systems scientist, Faculty of Arts

“It strikes me that the principles of an economy of mana strongly align with the tourism criteria we need – they’re right for the bank balance, operators, taiao and the community,” says Dan.

Dr Sarosh Mulla is a senior lecturer in the School of Architecture and Planning who, for his PhD, helped design the award-winning Welcome Shelter at the Waikereru Longbush Ecosanctuary in Tairāwhiti Gisborne, an environmental education and volunteering facility. The sanctuary is owned by Distinguished Professor Dame Anne Salmond and her late husband, architect Jeremy Salmond.

Sarosh says Waikereru is a great example of how tourism has the power to positively contribute to the preservation and restoration of the natural environment and attract eco-tourists.

“Many tourists are looking for participation rather than observation when they visit,” he says. “They’re enthusiastic about getting involved and they provide a financial resource that can be used on-site or in the surrounding communities.”

He says for this to happen, New Zealand needs to be honest about the state of its environment.

“While our landscape is magnificent, we face greater environmental challenges than before. Land use around the country is not as simple as our marketing campaigns suggest overseas.

“But if we can be more open about our role in defining and creating landscape experiences, tourists can play a part. They enjoy contributing – by planting, maintaining and building. It can form a genuine link for the visitor to the landscape and a long-term relationship with it.”

Andreas says if Aotearoa is to become a global leader in regenerative tourism, it needs to give greater control to Māori communities.

“We need to incorporate values such as whānau (connections) and kaitiakitanga (guardianship) in all tourism operations. That will provide foreign and domestic tourists with authentic cultural experiences that nurture relationships between people and places and maintain our backyard for future generations.”

However, the very type of tourist that might be interested in eco-friendly experiences may not even get on the plane. In news magazine *Der Spiegel* recently, German climatologist Hans Joachim Schellnhuber said people should think carefully about whether they book a holiday to New Zealand because such a trip would ruin their individual carbon dioxide balance.

Says Andreas: “If fewer climate-conscious holidaymakers from Europe travel here, maybe it’s time for our tourism sector to rethink its overseas marketing strategy. It may be better to cater for high-value, low-impact visitors looking for an extended, unique Aotearoa experience instead of a quick, cheap visit to tick off another destination from their bucket list.”

He also suggests focusing on a visitor pool closer to home – Australia and the Asia-Pacific.

Dr William Cheung is a senior lecturer in

Property at the Auckland Business School. He believes we stand at a crossroads in shaping our tourism sector’s future.

“The pandemic has really underscored the urgent need for sustainable tourism,” he says.

His research sheds light on the detrimental effects of over-tourism, influxes of visitors that degrade both the quality of life for locals and the overall visitor experience. He says the closure of Te Wai o Te Taniwha/the Mermaid Pools is a potent illustration of unchecked tourism’s fallout.

“But equally, we must be conscious of the ripple effects of ‘touristification’ – tourism-induced gentrification – which affects not just our natural landscapes but also our retail sector and housing markets.”

William has analysed data showing the impact of Airbnb on communities. He has developed a prototype rental index for the Auckland Airbnb market that tracks the Airbnb effect on the local rental housing market.

“Airbnb and unbridled tourism growth can skew local economies, inflate property prices and dislocate local communities. We need to manage this growth judiciously to sidestep such pitfalls.”

William also says bringing local communities into the fabric of tourism planning is the key.

“Residents are not mere spectators; they are the cultural heart and social backbone through which tourism is delivered. Their active participation can foster a more authentic, sustainable tourism sector.

Future Market Insights predicts sustainable tourism will grow by more than 16 percent in ten years from a base of \$13.5 million in 2022.

“Improving tourism yet appreciating its importance to the economy is all about extracting wisdom from our past and harnessing it for a more sustainable, inclusive and resilient tourism sector,” says William. “We need to embrace unique, tailor-made experiences over mass tourism, reducing environmental impact.”

Tourism New Zealand (TNZ) outlines in its state of performance expectations from June 2023 its wish to attract “visitors defined by the way they contribute positively to our natural environment, culture, society and economy” as well as those with “environmental consciousness and engagement with our local culture”.

TNZ is also one of the seven tourism groups promoting ‘Tiaki, Care for New Zealand’ to encourage visitors to care for our people, places and culture. It says Tiaki principles are core to the country’s sustainable tourism future.

“The Tiaki kaupapa invites visitors to see New Zealand through a Māori world view and guides their behaviours while travelling.”

René de Monchy, Chief Executive of TNZ, is a Business alumnus from the University. He says by 2030, TNZ’s vision is that all visitors are high-quality. “It will lead to a more productive and regenerative Aotearoa New Zealand. Tourism must give back more than it takes.”



Professor Andreas Neef says tourists paying a premium for eco-friendly and culturally immersive experiences could increase revenue to be channelled into conservation.
Photo: Elise Manahan

“Airbnb and unbridled tourism growth can skew local economies.”

– Dr William Cheung,
Business School





The University of Auckland's influential 40 under 40 awards are back for 2023.

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

HUMANITARIANS

- MEG DE RONDE** MA
Tatau-Uruora CEO, Te Kāhui Tika Tangata Human Rights Commission
- SAMMY HUGHES** BEd(Tchg)/PGDipEd
Chair and founder, Nōna Te Ao Charitable Trust
- JANE LUDEMANN** BOptom
Founder and trustee, Cure Our Ovarian Cancer (profile, page 30)
- LESIELI OLIVER** BA
Founder and chief visionary officer, Lālanga
- PINAMAN OWUSU-BANAHENE** BHSc
Founder, ADJOAA (Ghana/UK)
- KINGI SNELGAR** BA, LLB
Barrister, Bankside Chambers
- DR ANNE WYLLIE** MSc
Principal investigator, Yale School of Public Health (US)

PERFORMERS

- LUCIANE BUCHANAN** BA
Self-employed actor (profile, page 29)
- AMALIA HALL** BMus
Concertmaster at Orchestra Wellington, Violinist at NZTrio
- PHOEBE LEE JASPER** BMus
Self-employed songwriter (UK)
- DR LANA LOPESI** BFA(Hons)
Assistant Professor, Department of Indigenous, Race and Ethnic Studies, University of Oregon (US)
- ZAC LANGDON-POLE** BFA(Hons)
Self-employed artist
- JACK WOON** BE, BA(Hons)
Director, Unko Films

BUSINESS LEADERS

- DR EMILY AFOA** PhD Civil Engineering
Pou Whakarāe Director, Tektus Consultants Ltd
- JARED BROAD** BE
CEO, QuantConnect (US) (profile, page 29)
- MARK CAMPBELL** BCom, BProp
CEO, Jasper
- SUSAN CHEN** BA, PGDipCom
HR director, Riot Games Asia (Singapore)
- KAUSHALA RATNAYAKE** MBioEnt
Head of strategy, Bauer Media (UK)
- DR MANUEL SEIDEL**
PhD Mechanical Engineering
CEO, ecoPortal
- JENSON VARGHESE** MEngSt
Managing director, MRCagney

ENTREPRENEURS

- MARIA JOSE ALVAREZ** MBioEnt
Managing partner, WNT Ventures
- FREDDY GONZALEZ BRUNA** MEngSt
Chief engineer and co-founder, Vertus Energy (Austria)
- JAMES CORBETT** BSc
Technical co-founder, Auror
- ZOE REECE** BE(Hons)
Founder and CEO, Ora Pharm
- BENJAMIN REYNOLDS** BCom
CEO, Spalk (US)
- DR SHANE SMITH** MBChB
Adviser, Education Perfect
- DR JU ZHANG** PhD Bioengineering
CEO, Formus Labs (profile, page 31)

DISRUPTORS AND INNOVATORS

- BENJAMIN BARTLE** MSc
Director, Climate Finance, Emerging and Developing Markets, Rocky Mountain Institute (US)
- DONOVAN FARNHAM** BEd(Tchg)
Director, Te Ahunui Ltd (profile, page 30)
- JANINE GRAINGER** BCom
CEO, Easy Crypto
- DR IZZY JAYASINGHE** PhD, Physiology
Associate Professor, Head of Department of Molecular Medicine, University of NSW (Aus)
- SIMRAN KAUR** BOptom
Director, Girls That Invest
- ALEX WORKER** BCom(Hons)
Co-founder LILO Desserts, Chief Growth Officer NewFish, Country Manager Impossible Foods, Chair of Future Food Aotearoa

INFLUENCERS

- HOLLY BENNETT** LLB
Founder and Kaitūhono Ariki, Awahi
- SHEA BOWDEN** BEd(Tchg), PGDipEd
Deputy principal, Manurewa West Primary School
- TROY BROCKBANK** BE
Pou Ārahi Māori, Pattle Delamore Partners Ltd
- DR RILEY ELLIOTT** PhD Marine Science
Shark scientist/TV presenter, Shark Man Ltd
- DR EMMA ESPINER** MBChB
Surgical registrar, Middlemore Hospital
- DR VALERIA SADOVYKH** PhD InfoSyst
Technology strategist, Microsoft (US) (profile, page 31)



READ FULL PROFILES FOR ALL:
auckland.ac.nz/40-under-40

Know an Auckland graduate doing great things? See page 46 to find out how to let us know about them for the next list.



BUSINESS LEADER

JARED BROAD

CEO, QuantConnect

BE

Jared Broad is the CEO and founder of US-based firm QuantConnect, a disruptor in the growing field of quantitative finance.

Often referred to as the ‘rocket-scientists’ of Wall Street, quantitative finance experts, or quants, craft algorithms to design and implement investment strategies. The role can be highly lucrative and quants are famously secretive when it comes to their mathematical modelling.

But QuantConnect took a different approach when it launched nearly ten years ago, by making its technology open-source, a move that was met with great scepticism.

“We were rejected by more than 150 venture capitalists in one year,” says Jared, who holds a Biomedical Engineering degree.

Unusually, Jared spent most of his career doing humanitarian work in hostile environments, rather than working in finance, adding to the challenge of raising capital for a venture perceived as risky.

To overcome this, alongside his aid work, he spent six months building a prototype platform without seed funding before finally attracting significant angel investment.

That was in 2014 and since then QuantConnect has thrived. It has grown to 250,000 users worldwide and in 2022 it was recognised as the world’s best quantitative finance platform.

Jared is particularly proud of QuantConnect’s engineering-focused culture, which he says carries over from his undergraduate days.

“I am grateful for my start at the Biomedical Engineering Institute where I was exposed to cutting-edge science,” the 39-year-old says.

“The University of Auckland surrounds you with other people who are looking to achieve big goals despite being far from the world’s epicentre.”



PERFORMER

LUCIANE BUCHANAN

Self-employed actor

BA

Luciane Buchanan is an actor, producer and screenwriter who stars in *The Night Agent* thriller series (2023), one of Netflix’s five most popular English-language shows.

Stephen King is a fan, praising the “good chemistry” between Luciane’s character and the hero.

“Having him tweet about our show and our characters was pretty crazy,” says Luciane.

The 30-year-old Mt Albert resident broke ground with the first professional short film to be written and directed by Tongan women. She wrote the 2020 film *Lea Tupu’anga (Mother Tongue)* about the importance of language. It was directed by Ve’a Mafale’o.

Luciane is also in Jason Momoa’s *Chief of War* historical drama series. She is keen to produce more stories she’s passionate about.

“My family are my main inspiration for everything I do: their work ethic and resilience; their sacrifices and support,” says Luciane, whose mother’s family immigrated to Aotearoa in the 1970s.

Luciane has a BA in drama and psychology which allows her to go deep into ‘fun’ character exploration.

“Having studied psychology, I’m always pushing to figure out why characters make these decisions,” she says.

She loved her time at university – fondly remembering the Psychology Kōhanga study space and the AV library – and credits Tuākana peer support for making a difference.

“I really found my confidence as an individual in those years.”

While she claims she’s ‘lucky’ career-wise, she makes a point. “It is still challenging, in a space that is predominately male and white, to stay true to my instincts as a storyteller.”

But she relishes the ongoing learning. “I want to be pushed, in whatever is next.”



DISRUPTOR AND INNOVATOR

DONOVAN FARNHAM

Director, Te Ahunui Ltd
BEd(Tchg)

Working in the Māori world isn't a nine to five job, says Donovan Farnham (Ngāti Awa, Tūhoe).

"I am a lot of different things, including a teacher, a translator, a consultant and a businessman," the 39-year-old says. "My identity comes from the fact that I'm all of those things at any given time."

Although he may have a range of titles, Donovan's working life has one clear focus.

"My knowledge of te reo Māori has got me to where I am now."

Reflecting on his time at the University, where he completed a Bachelor of Education specialising in Huarahi Māori, Donovan says that he was "introduced to paradigms that challenged my thinking, leaders in their fields, and opportunities that would not have been afforded to me elsewhere."

He's also grateful to the 'pillars' who guided his journey through te ao Māori.

"I am where I am because of my elders."

Having become a licensed interpreter and translator of the Māori language, receiving a masters in Māori Language Excellence and now planning his doctorate, Donovan says there's been no 'magical moment' where he felt he has reached his goals. In 2021, he established Te Ahunui Ltd, which provides Māori-language consultation, translation services and professional learning and development. He says his work will continue well beyond the confines of a day job.

"I'm pleased with what I've done so far. But there's always the next thing."

"Everything I do in my professional capacity is for the betterment of te ao Māori," says the 40 Under 40 recipient for 2023.

"Not only is that rewarding in itself, but I know that my knowledge of te reo Māori has got me to where I am now."

HUMANITARIAN

JANE LUDEMANN

Founder and trustee, Cure Our Ovarian Cancer
BOptom

When Jane Ludemann graduated with a Bachelor of Optometry in 2010, her sights were firmly set on eventually becoming a partner in an optometry firm, and perhaps volunteering overseas.

But when she received an ovarian cancer diagnosis at the age of 32, along with a life expectancy of five to 15 years, everything changed.

As she went through treatment, Jane was confronted by the health disparities that still exist for women, and the lack of funding for ovarian cancer research.

"The most shocking thing I've learned is how huge the inequities are for ovarian cancer and just how much unconscious gender bias impacts the healthcare people receive," she says.

"I am proud of the changes I'm helping to make."

In 2018, she founded Cure Our Ovarian Cancer, and has since worked to fight for better outcomes for those with ovarian cancer. Jane established the first ovarian cancer research fund in the country, the first online ovarian cancer support group, and raised more than \$500,000 in research funds.

"This certainly wasn't the future I had planned for myself, but I am proud of the changes I'm helping to make."

Now 38, but still facing an uncertain life expectancy, Jane says she remains focused on her legacy. She wants to ensure women living with ovarian cancer have an improved length and quality of life, and that Aotearoa leads the way with ovarian cancer research.

"I have been incredibly fortunate to meet so many amazing women with ovarian cancer who have supported me," she says. "When things are really hard, I remind myself what a privilege it is to be here and to be able to use my voice when so many women aren't here to use theirs."

"They give me the strength to carry on."



INFLUENCER

DR VALERIA SADOVYKH

Technology strategist, Microsoft
PhD Information Systems

Putting the academic into practice in the cutting-edge world of artificial intelligence is the work of “pracademic” Dr Valeria Sadovykh, who went from Russia via Auckland to a job at the world’s biggest software company in the United States.

Valeria, 36, came to New Zealand aged 17 on her own, without knowing a word of English, finished secondary school and enrolled at the University for a Bachelor of Commerce. After 11 years of study, much of it part-time while working to pay her way, she left with a PhD in Information Systems. She is now employed by Microsoft as a Los Angeles-based technology strategist.

“I am a pracademic, blending academia and practical expertise,” says Valeria. “At Microsoft, my focus is on transforming companies into intelligent, adaptive and sustainable enterprises through the integration of AI technologies.”

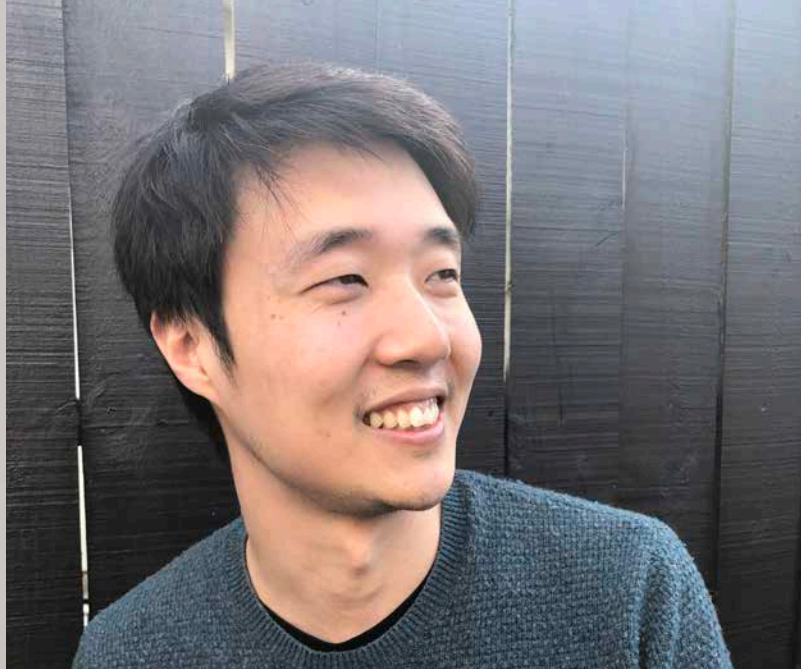
After initially graduating with a BCom with first-class honours, she knew she wanted to have global experience and exposure.

“I wanted to become an expert in my field, working with top companies on assignments worldwide.”

Valeria says the inspiration of her mother, Alla Sadovykh, and guidance of Professor David Sundaram at the Business School, were critical. David advised her to undertake MCom and PhD degrees part-time, saying they would set her apart in the market and open doors for her internationally.

That’s how her career is playing out. After a decade at consultancy PwC, and with an EB1A green card for being an “individual with extraordinary ability” giving her permanent US residency, Valeria is now helping shape how Microsoft, a leader in AI, is thinking about the technology.

“I wanted to work on assignments worldwide.”



ENTREPRENEUR

DR JU ZHANG

CEO, Formus Labs
PhD Bioengineering

When it comes to joint ventures, the usual sort combines the expertise of two or more commercial partners in some common enterprise. Then there are rare kinds such as Auckland-based Formus Labs, which sprang from the Auckland Bioengineering Institute at the University of Auckland.

The ‘joint’ aspect of Formus includes human hips, knees and shoulders. Biomedical engineer Dr Ju Zhang, 36, co-founded the company seven years ago to improve the success rate of joint-replacement surgery. He points out one in five knee replacements prove unsatisfactory and one in ten hip replacements needs later revision, costing billions of dollars.

“You wouldn’t build a car without knowing the parts fit and it shouldn’t be any different with joint-replacement surgery,” Ju says.

Nearly two decades on from undertaking a bioengineering and biomedical engineering degree, Ju has developed a world-first artificial intelligence-based method of planning orthopaedic surgery.

The technology, commercialised by Formus, has reduced a process that used to take weeks to just one hour. In May, Formus received US Food and Drug Administration regulatory approval for its automated hip-replacement pre-op planning system. Formus now has 25 staff and has partnered with one of the largest orthopaedic companies in the world.

“Nearly two million joints are replaced every year worldwide and that is set to double by the end of the decade,” says Ju. “Automated pre-op planning gives surgeons a custom surgical plan in advance for every surgery.”

That’s great for time-constrained surgeons, but also has big potential to improve outcomes for their patients.

“You wouldn’t build a car without knowing the parts fit.”



Ned Fletcher: battling entrenched historical views

An Ockham award-winning non-fiction book concludes 'sovereignty' in the English draft of the Treaty of Waitangi means sovereignty solely over the British settlers. Janet McAllister talks to historian, lawyer and author Ned Fletcher.

The English text of the Treaty of Waitangi, as drafted in 1840, clocks in at 562 words. In contrast, Ned Fletcher's *The English Text of the Treaty of Waitangi* weighs in at an impressive 736 pages.

Dr Edwin Fletcher – 'Ned' to all – is surprised the doorstep adaptation of his doctoral thesis is the talk of the town.

"I thought it would sink without trace," says the unassuming lawyer.

But after 15 years of preparation – including seven years' doctoral study, and a fight with an aggressive cancer – Ned's study of the development of the English-language Treaty text cannot be ignored. It has attracted weighty accolades: compliments on its cover by two former Waitangi Tribunal chairs (Sir Eddie Durie and Supreme Court justice Sir Joe Williams); a shortlisting for the 2023 Ernest Scott Prize for Australasian history; and the big win, general non-fiction book of the year at the 2023 Ockham New Zealand Book Awards.

All this, because, as *New Zealand Journal of History* reviewer Samuel Carpenter declared, Ned's book is "one of the most significant works of scholarship on the Treaty of Waitangi ever published". Ned saw a research gap hiding in plain sight, and filled it with meticulous research and brilliant analysis (supervised by Faculty of Law professors David V Williams and the late Mike Taggart, and Associate Professor of History Ruth Barton). Surprisingly, nobody had ever dug deep into how the English-language draft of the Tiriti was prepared; it was commonly assumed it took just a few days. But Ned shows London and Sydney administrators recommended Treaty ideas and phrases long before February 1840. That was a surprise, even to Ned.

"Part of the reason the thesis took seven years was the joy of going down these research paths, finding out you don't know anything," says Ned. "I had no idea I was writing a history of ideas."

Dr Ned Fletcher overturns 50 years of assumptions about our nation's founding documents in his book.

Photo: William Chea

He agrees with the orthodox position that te Tiriti o Waitangi in te reo Māori (the version signed by most rangatira) holds precedence over the English-language Treaty. But he disagrees that the two documents contradict one another. Instead, he daringly concludes 'sovereignty' in the English draft means sovereignty solely over British settlers, and therefore it is reconcilable with the promises to Māori of tino rangatiratanga.

In this, Ned overturns 50 years of assumptions about our nation's founding documents, "battling some entrenched historical views". In his view, the initial architects of the Treaty aimed to ensure British settlers did not trouble Māori. Although they failed spectacularly, "the Treaty was offered in good faith, it was a good foundation," says Ned. He finds this conclusion more hopeful than thinking the Treaty draft and te Tiriti are incompatible due to skulduggery, because that conclusion "bases the nation on rotten foundations".

Ned hopes his work shows that the Treaty drafters did not think "sovereignty is absolute".

"The idea of one law for all runs contrary to our history and to the Treaty," he says.

That's a statement of fact, but it is powerful, particularly as Ned is both a subject expert and a well-respected member of polite society. His statement offers establishment support to the aim of honouring te Tiriti, for the benefit of all.

He believes "if Māori had continued to be self-governing and retained control over their land and other taonga", intergenerational deprivation would not have occurred – and therefore, as a prosecutor, he would not see Māori overrepresentation among victims or the accused.

Commentator Morgan Godfery suggests Ned's book supports arguments for co-governance – does Ned agree? Ned stresses his work does not examine the past 183 years, but he does say, personally, he is not sure co-governance goes far enough. "The Treaty promise is of tino rangatiratanga and it's one that has to be confronted in our own time ... I hope we can be bolder and more imaginative."

IN THE BLOOD

Ned jokes that this whole writing a book enterprise is the fault of his mother, former Chief Justice Dame Sian Elias. She suggested his masters thesis topic: the coming of English law to New Zealand. Ned says he got "halfway decent at reading 19th-century handwriting" – the strongest self-praise his self-deprecating humour will allow – and a decade later, in 2007, his doctoral topic unfolded from this earlier research.

Both Ned's parents have served on the University Council, and his father, Hugh Fletcher, was University Chancellor from 2004

to 2008. "My parents were very proud graduates of the University of Auckland," says Ned.

"They talk about the University a lot – they're passionate about higher education and the state of our universities is something that concerns them. They were so encouraging, and now so happy someone in the family has a doctorate. They also had a huge measure of satisfaction from the warm reception to the book, after such a long process."

The most difficult part in the book's creation was nothing to do with the research.

"The idea of one law for all runs contrary to our history and to the Treaty."

– Dr Ned Fletcher, MA History, PhD Law, author of *The English Text of the Treaty of Waitangi*

In December 2012, Ned received a shock leukaemia diagnosis.

"It was very much out of the blue. I had just been feeling a bit tired."

He immediately downed tools on the thesis, for aggressive chemotherapy. Treatment went incredibly well in the "wonderful care" of Auckland Hospital, and it was all over by April the following year. The cancer has never returned. Ned rested and recovered for the rest of the year.

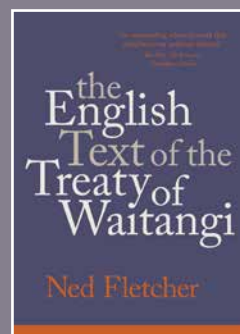
"I was at a point in the thesis where a little bit of a break was not a bad thing."

Ned says it was a blip that never got so bad he had to face his own mortality, although he acknowledges there was "much more anxiety for my family – the children were young".

The three children are now in their teens. Ned, his wife – Manukau Crown solicitor Natalie Walker – and their colleague Gareth Kayes run Kayes Fletcher Walker, employing more than 50 lawyers. Its solicitors are involved in University tutoring and judging moots. Several of the firm's University graduates left this year on prestigious postgraduate study trips.

"It shows University of Auckland graduates are up with the world's best," says Ned, citing as examples Jimmy Toebes, a Fulbright Scholar at New York University, and Jessica Fenton, a New Zealand Law Foundation Ethel Benjamin Scholar at Yale.

Ned himself enjoyed his research days and has just started missing his beloved microfilm archives that were the heart of it. Perhaps there'll be another literary bombshell in 15 years.



WIN THE BOOK

We have one copy of *The English Text of the Treaty of Waitangi*, (Bridget Williams Books, 2022) \$70, to give away. Email: ingenio@ auckland.ac.nz with 'Ned Fletcher book' in the subject line and your name and postal address in the body. Entries close on 1 December.

TIPS ... TO COMBAT SEASONAL ALLERGIES

While warm temperatures and blooming flowers are great news for outdoor activities, a change in season can bring an increase in people's allergic symptoms. Seasonal allergies – including hay fever and allergic eye conditions – affect more than one third of the population and are caused by pollen allergens commonly found in the air. With climate change, the pollen season is arriving earlier and staying longer, meaning we are likely to see an increase in such allergies, and a longer period of suffering for those with them.

Dr Amy Chan has seven tips to combat seasonal afflictions.



1 Recognise what you have
Some allergy symptoms can be mistaken for something else, such as a cold or 'flu. If you have a runny nose, sneezing, itchy eyes, nose or throat for longer than a couple of weeks, you need to identify the cause (read on!). Allergies can start even if you've not had them before. Check in with your doctor.

2 Find your triggers
The triggers for seasonal allergies vary from person to person, and one month to another. Tracking your symptoms can be useful to get an idea of when they are worst so you can work out what you may be allergic to. If your symptoms tend to come on early spring, your main trigger may be tree pollen. In late spring and early summer, grass pollen tends to be highest, while in late summer, weed pollens may be your trigger. If you have symptoms all year round, you may be affected by allergens inside your home, work or school environment rather than outdoor triggers.

3 Protect yourself
While you may not know for sure what your triggers are, there are simple steps to help reduce your exposure to potential allergens. Some ideas include staying indoors on dry, windy days when pollen levels can be high. If you do need to be out, wear a mask or face covering, sunglasses and a hat, and tie up long hair. Pollen levels are highest between 5am and 10am, so keeping windows closed and going out later in the day can reduce exposure. When driving, shut your vents and recirculate interior air, or turn on air conditioning. If you have bad symptoms after being outside, it's worth changing your clothes to avoid bringing pollen inside. Your body and hair can collect pollen, so shower at night to keep pollen from your bed.

4 Your home, your castle
Some people are triggered by indoor allergens like dust mites, moulds, animal dander, and cockroaches. Keeping your house clean and decluttered helps because clutter accumulates dust. If you're sensitive, wear a mask and gloves and use allergy-friendly products, particularly if you have a chemical sensitivity, eczema or asthma. It goes without saying that regular vacuuming and dusting can remove allergens from your surfaces, but if you can afford it, invest in air conditioning with a high-efficiency particulate air (HEPA) filter too. It will reduce circulating allergens including mould, dust and pollen. It's also worth removing your shoes at the door to avoid bringing in allergens, and keeping indoor air dry with a dehumidifier.

5 Try anti-allergy medication
If allergic rhinitis (hay fever) is affecting your quality of life, and/or you also have asthma, a doctor can prescribe intra-nasal corticosteroid sprays, allergic eye drops and anti-histamine tablets. These are also available over-the-counter in pharmacies. If possible, start taking your medication(s) as prescribed two weeks before the allergy season is expected to start. That can help reduce your sensitivity to pollen triggers.

6 Hydrate
As part of your body's allergic response, allergens can trigger nasal swelling and congestion, and non-stop nose blowing. Drinking water and keeping well hydrated helps to thin the mucus in your nose. Saline nasal sprays or irrigation solutions from the pharmacy can help loosen up mucus and wash out any allergens trapped in your nose.

7 Sleep easy
First, take any antihistamine before bed. Allergy symptoms can feel worse at night, and can be caused by pollen on our clothes or bedding. Wash bedding regularly, ideally in hot water over 60°C. Throw a spare sheet over your bed during the day to protect your bedding from allergens. If you can, avoid hanging laundry outside, as pollen can stick to sheets and clothing. And (sorry, pets) try to keep animals out of the bedroom.

Dr Amy Chan is a senior clinical research fellow in the School of Pharmacy. These tips were written in collaboration with Allergy New Zealand.

INSPIRATIONAL HISTORIAN

At 100, Russell Stone is still writing every day. The trailblazing historian reflects on his work, talking to Professor Linda Bryder.

Emeritus Professor Russell Stone has given us a call because there are a few bits he wants to clarify in this Golden Graduate article.

This would be unremarkable, but for the fact it's not every day you chat on the phone to a centenarian.

Russell turned 100 in April, 35 years after retiring from the University of Auckland. He'd joined the staff in 1964, after some years as a secondary school teacher.

His association with the University began as a student in 1941 and extended over 80 years. He gave his last formal lecture in the History Department in 2018.

The following year, I invited Russell to give the opening lecture at the first symposium of the Auckland History Initiative, in the School of Humanities. It's a programme to inspire young scholars to focus not only on New Zealand history but also local history.

Russell's interest in Auckland history began shortly after his MA (Hons) in 1949, although at that time interest in local history wasn't fashionable and little of an academic nature had been written about the city itself.

"That's why being appointed to the History Department gave me great satisfaction," says Russell. "It gave me a chance to add to the story of Auckland's past."

Russell's history teaching over the years, however, was mainly concerned with modern Britain, Germany and international relations, not New Zealand. Yet the history of Auckland continued to dominate his research.

"I always found it a bit odd, given the settlement's early pre-eminence as the colony's political capital and its emergence in the years since as New Zealand's commercial capital, that there was a distinct lack of interest in the city's past."

But that has changed, and Russell's 12 books and numerous articles on various aspects of Auckland's history have contributed to the revival. In the 2002 New Year Honours, he was awarded an ONZM for his services to historical research.

"Today, in both the community and the University itself, there's a lively interest in



Auckland's past and its social and commercial heritage," Russell says.

His work on local history put him ahead of his time. His important 2001 book, *From Tamaki-Makau-Rau to Auckland*, draws on local Māori oral histories, archaeological evidence and early missionary diaries and histories. It's a comprehensive account from the first settlement about 800 years ago to 1840. More recently, he updated his two-volume biography of influential Aucklander Sir John Logan Campbell, providing an account in Campbell's own words drawn from his correspondence, reminiscences and his 1881 memoir, *Poenamo*.

Russell's autobiographical account, *As It Was: Growing Up in Grey Lynn and Ponsonby Between the Wars* (2017) also became a springboard to cover Auckland's social history of that time.

He is a generous scholar. In 2020, during a break between lockdowns, I invited Russell to give a lecture by Zoom. You might think Zoom was a step too far for a 97-year-old, but he duly arrived at my house with his notes. Yet they remained in his satchel for the inspiring two-hour lecture – plus question-and-answer session on all aspects of Auckland's history – social, economic, political and environmental. The students were in awe.

So, how does such a dedicated historian spend his time at the age of 100, and what's his recipe for longevity?

"I'm kept busy by running my own home," he says. "In any time left, I read and write."

"At least half of what I read is fiction and half of that is escapist. I continue to write private reminiscences for my family. And every day since I retired, I have written a one-page entry in my diary."

"But I know of no elixir of life. I attribute my survival mainly to chance and to my genetic inheritance. My father died at 84; my mother at 103."

"Although I'm not sporty, I've always kept fit and try to keep on the move each day."

Emeritus Professor Russell Stone's research into local history put him ahead of his time, including his 2001 book, From Tamaki-Makau-Rau to Auckland.
Photo: Dean Carruthers

"Today... there's a lively interest in Auckland's past and its social and commercial heritage."

– Emeritus Professor Russell Stone

GOLDEN GRADUATES

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



UNIVERSITY OF
AUCKLAND
Waipapa Taumata Rau
NEW ZEALAND

140
YEARS

Posthumous honorary doctorates announced

As part of the commemorations for its 140-year anniversary, Waipapa Taumata Rau, University of Auckland has conferred three posthumous honorary doctorates on a group of extraordinary New Zealanders.

BRUCE McLAREN

Intuitive engineer, innovator, motorsport legend (1937-1970)

As a University of Auckland engineering student, Bruce won the first New Zealand International Grand Prix Association's 'Driver to Europe' scholarship. It changed his life, and the international car racing industry.

In 1959, at the age of 22, he became the youngest winner of a World Championship Formula 1 Grand Prix, a record that remained unbroken for 44 years.

Just four years later, he established Bruce McLaren Motor Racing Ltd, initially designing, building and racing cars for the New Zealand/Australian Tasman summer series. With Kiwi teammate Denny Hulme, he dominated the North American Can-Am Championship series from 1966 to 1970, a record cut short by his premature death in June 1970 while testing his latest Can-Am car. He was just 32.

From its beginnings as Bruce McLaren Motor Racing Ltd, McLaren has evolved into one of the world's most admired racing and automotive brands.

The McLaren of today is a validation of Bruce's vision, as a producer of lightweight, carbon-fibre constructed supercars and a pioneering racing team competing around the world in Formula 1, IndyCar, Formula E, Extreme E and esports.



Portrait of Bruce McLaren in 1960, in his Cooper-Climax race car at Ardmore Aerodrome racetrack, South Auckland. Photo: Dominion Post (Ref: EP/1960/0060-F. Alexander Turnbull Library, Wellington)

Right: Statue of Bruce McLaren with his honorary doctorate presented August 2023. The award coincides with the 60th anniversary of Bruce McLaren founding the UK-based company that still bears his name. Photo: Patrick Gosling



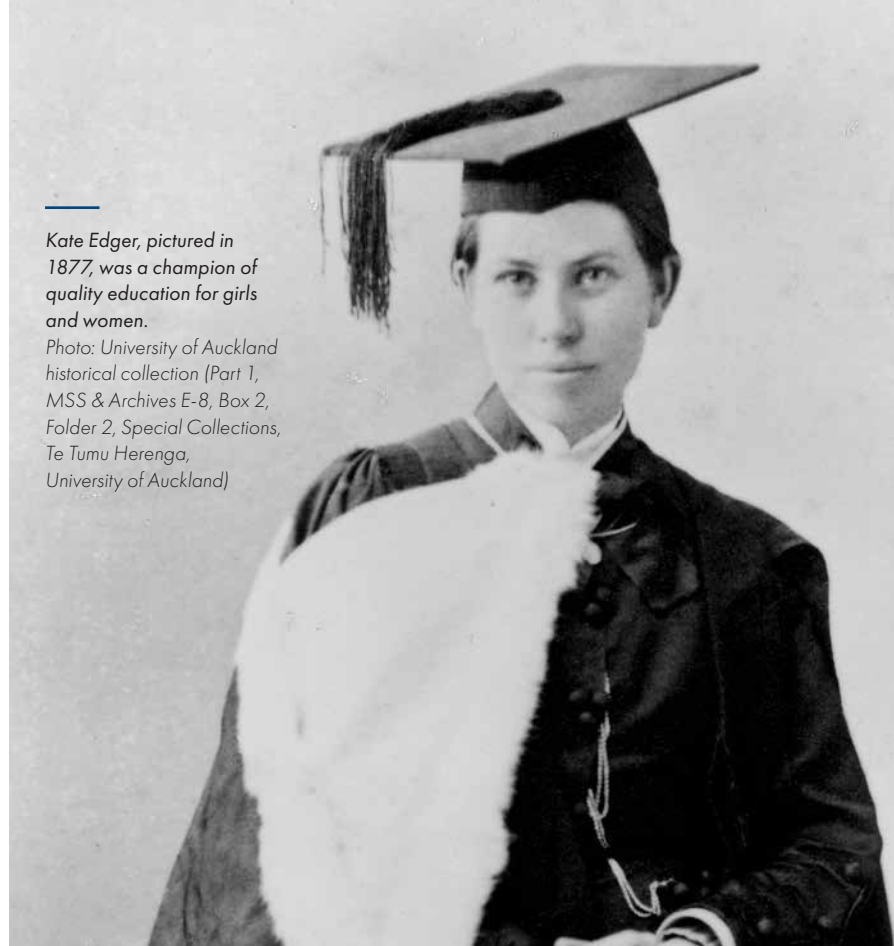
KATE EDGER

First woman in British Empire to earn a Bachelor of Arts (1857-1935)

On 11 July 1877, Kate Milligan Edger became the first woman in New Zealand to graduate with a university degree and the first in the British Empire to gain a BA. She completed her secondary education at Auckland College and Grammar School and then attended Auckland University College, an affiliated college of the University of New Zealand. More than 1,000 people attended her graduation ceremony in Auckland.

For the rest of her life, Kate Edger was a champion for quality education for girls and women, and an active suffragist. Kate earned her MA from Canterbury College and was appointed first principal of Nelson College for Girls. She taught English grammar, composition and literature, physical science, Latin, mathematics, singing and geography, and prepared senior girls for university scholarships.

After her marriage and move to Wellington, she combined running a private school for girls, adult literacy classes, examining for university entrance, suffrage and temperance activities and community work.



Kate Edger, pictured in 1877, was a champion of quality education for girls and women.

Photo: University of Auckland historical collection (Part 1, MSS & Archives E-8, Box 2, Folder 2, Special Collections, Te Tumu Herenga, University of Auckland)

She was awarded the King's Silver Jubilee Medal shortly before her death in May 1935. At the University, the Kate Edger Information Commons carries her name and the Kate Edger Charitable Trust, funded primarily through academic dress hire, has distributed more than 1,200 financial awards to students, mainly female, to promote and advance education.

EPELI HAU'OFA

Visionary poet, writer, anthropologist (1939-2009)

Born to Tongan missionary parents in Papua New Guinea, Epeli Hau'ofa was a true son of the Pacific, schooled in Papua New Guinea, Tonga and Fiji. He was a citizen of Fiji at the time of his death.

Epeli attended universities in New South Wales, Canberra and Montreal, tutored at the University of Papua New Guinea and held influential positions at the University of the South Pacific (USP). In 1997, Epeli was the founder and director of the Oceania Centre for Arts and Culture at the USP in Suva. Under his leadership, it became a world-class centre for showcasing and disseminating Pacific artistic expression.

His connections with Waipapa Taumata Rau, University of Auckland began as a

visiting senior fellow in Māori Studies and Anthropology, at a time when discussions on establishing the Centre for Pacific Studies were taking place and in which Epeli played a part.

Out of his fellowship came the paper, 'The New South Pacific Society: Integration and Independence', one of a collection of critical essays in the pivotal book *Class and Culture in the South Pacific*.

He continued to pass through the University for research and was regularly invited to give guest lectures in Pacific Studies. Epeli and his close friends at the University were actively and collectively influential upon each other.

His contributions to, and impact on, Pacific scholarship and literature extend across the region to include Waipapa Taumata Rau, University of Auckland.



Epeli Hau'ofa in 2001. His Pacific scholarship and literature extends across the Pacific and includes this University. Photo: Otago Daily Times (Hocken Collections, University of Otago Library)

Anthony Doesburg talks to three University of Auckland alumni whose degrees led them to roles in very different parts of the world.

ORIANA BRINE

Singapore

In a time when environmental disaster hogs the headlines, Singapore-based Oriana Brine, a marine science and biodiversity masters graduate, offers a nugget of hope.

“The good news is biodiversity loss is increasingly being recognised as one of the most important and likely business risks, alongside climate change,” says Oriana.

Recognising a problem is the first step to finding a solution, and Oriana’s job at the Boston Consulting Group’s climate and sustainability hub is to support big businesses in transforming their commitments into action.

Below: Oriana Brine with husband Elliot McKeown, University of Auckland Law alumnus, at one of their favourite restaurants in the suburb of Tiong Bahru.

“Every day I think about how I can learn more from international experts and reimagine what the future could look like.”

The best thing about the role is working “with the most curious minds” on new ways to solve the biggest challenges of our time: climate change, biodiversity loss and growing social inequality.

“Every day I think about how I can learn more from international experts and reimagine what the future could look like to create environmental, social and economic change.”

Studying science was always Oriana’s plan, but she found working in a lab didn’t suit her.

“I have always been interested in the way things work and I relate best to biological systems because you can see how plants and animals interact in front of your eyes.”

An interest in how the environment affects the economy led her to the University’s biosecurity programme, after which she found work in the Ministry for Primary Industries biosecurity response team.

She and her husband Elliot, a law alumnus, were seduced by Southeast Asia during a holiday and decided they would return to live there after first getting more experience in their chosen fields in Auckland.

They’ve been in Singapore since 2019.

Oriana loves the diversity of the city’s people and its exotic blend of food, culture and ideas.

“You’ll have a Korean BBQ restaurant, Chinese temple, co-working office, European cheese store and eight-storey malls within two blocks.”

And there’s no need to feel homesick.

“There’s a tonne of New Zealand food products sold here, so you never feel too far from home.”

Not that living in Aotearoa in the future is off the agenda.

“Our country is unique – I haven’t met an overseas Kiwi who doesn’t want to go home.

“The question is when. There’s a lot more I’d like to see and do before returning.”



GUSTAVO PERNIA

Santiago, Chile

Gustavo Pernia is happy to bestow a little free urban-planning advice on Auckland's city leaders from where he's living in Santiago.

"I'm an advocate of mixed-use, medium-density neighbourhoods, prioritising clean public transport and incentivising a gradual change towards polycentric cities," he says.

He lived in Auckland for his urban planning degree at the University from 2016 to 2018, but the 37-year-old Venezuelan is now nearer his homeland, working as an architect and research and development consultant on projects across Latin America.

"My Auckland experience, with the degree and also the work I did at an architecture and urban design firm, allowed me to be involved in international projects covering a wide range of design needs and scales," Gustavo says.

"I'm now into digital manufacturing of the built environment and also connected with cross-media storytelling endeavours."

Gustavo, who came to New Zealand with the help of a scholarship from New Zealand's

Ministry of Foreign Affairs and Trade, chose New Zealand to improve his English because of its geographical and cultural distinctiveness.

He misses the multicultural environment, kindness and "the witty Kiwi banter", and urges people to embrace work and study overseas. "Living in a place, you experience it in a deeper way than as a tourist. It's enriching and rewarding."

Which isn't to say his present home doesn't have its advantages. "Where I am is a sort of personal hub that's well connected with my previous countries of residence. I have family and friends spread around South America, the US and Europe."

Even if Auckland gave itself a shot in the arm by intermingling new and reinvigorated old architecture, public spaces, transport hubs and diverse-use zones, adding up to Gustavo's idea of a liveable city, it would still lack what he has in Santiago. "I love having the snowy Andes mountain range right there, which you can look at almost every morning."

New Zealand, meanwhile, is just a direct flight away.



Gustavo Pernia with the Andes behind him.

"Living in a place, you experience it in a deeper way than as a tourist."

YUKTI VYAS

Bordeaux, France

A stellar academic career has delivered Yukti Vyas a dream position with the crème de la crème of neuroscientists in France. Yukti completed her four degrees, including a PhD in Biomedical Science at the University of Auckland, from 2010 to 2021, culminating in her move to the Bordeaux Neurocampus at Bordeaux University in France during the Covid pandemic, where she is a neuroscientist and researcher.

"I'm working on discovering and testing therapeutics for neurodevelopmental disorders such as autism, building on the research I did during my PhD," Yukti says.

She discovered her field during a summer internship at the Centre for Brain Research in the Faculty of Medical and Health Sciences in 2012. Along the way, she collaborated on multidisciplinary projects within the University, collected national and international awards, presented work at Australasian and European conferences, and was published in international journals. Yukti credits many mentors within the University with helping her. "Not only those who mentored me academically, but also those who encouraged and guided me to build my leadership and teaching skills.



When she can, Yukti Vyas likes to explore Europe. Here she is in Vyšehrad, Prague, with the Vltava River behind her.

"But, most of all, I am inspired by my grandparents, Mohan and Ramila Gandhi, who ignited a curiosity for science and discovery in me from a young age."

Yukti is now reaping the rewards of her efforts and the input of her teachers.

"Every day at work is different and every day requires a new aspect of problem solving and solution seeking.

"I am also supervising and mentoring students and the opportunity to inspire and coach the next generation of neuroscientists is one of the most exciting and rewarding parts of my work."

As a passionate traveller, she says being in Bordeaux is the icing on the cake.

"Living in France makes it easy for me to travel around Europe and the UK.

"But I miss my family and friends on the other side of the world – and New Zealand's delicious food."

"I'm inspired by my grandparents ... who ignited a curiosity for science and discovery in me."



A BIT OF CULTURE



Above: Sarah Smart.
Top: Some of the Kiwi guests at the coronation: Ben Appleton, alumnus Rhieve Grey, Rebecca Scown, Chris Luxon, Abdul Aziz, alumnus Craig Fenton, Richie McCaw and alumna Sarah Smart.

Sarah Smart is the UK champion of a Kiwi gourmet yoghurt big on sustainable impact. By Louise Chunn

Attending the coronation of King Charles III is the high point of Sarah Smart's time in the United Kingdom. Invited to attend the event by Kea New Zealand, she was one of several alumni of the University of Auckland.

Sarah runs the UK/European arm of high-end yoghurt business The Collective, and declares being at the Coronation as, "the most amazing experience of my life".

"I was a bit blown away, to tell you the truth; I just run a yoghurt business!"

Wearing a design by fellow Kiwi Emilia Wickstead, she accompanied the likes of Richie McCaw and NZ Rugby Commercial CEO Craig Fenton.

"Whatever you feel about royalty, it was a historically significant event and I just felt so privileged and proud to be there."

In 2001, armed with a BCom (Marketing), Sarah joined the graduate trainee programme at food giant Mars Inc. Within a couple of years, she was making major decisions. She knew how fortunate she was to have secured her place, but one day it struck her: "I'm only 22, I'm too young to be doing this!"

Sarah had started at Mars the Monday after her final exam. She'd had no break, no fun. So she took off for Aspen, Colorado, and supported herself waitressing, while volunteering on the mountain to get a ski pass, and generally having "heaps of fun snowboarding".

She met her future husband, UK-Australian Jordan Smart, and after a couple of high-octane years of travel, they settled in Auckland, where Sarah returned to work at Mars. A few years on, the couple wanted to try living in the UK. She took a job as marketing manager of Innocent Drinks, a natural juice and smoothie maker.

"They wanted people with experience, but not indoctrinated by corporate life."

Sarah ticked that box and delighted in her

five-year role in the game-changing business whose case study is a popular talking point in business schools. "I still use some of the tools and processes that I learned at Innocent."

She left the company when it sold to Coca-Cola, from which she benefited. "But nothing like the founders. I'm still working!" She was motivated to move because her first child had arrived and the family wanted to head home.

Sarah had met the founders of The Collective, chefs Angus Allan and Ofer Shenhav, while in London and was keen to work with them. There were synergies with Innocent, and she was excited at the innovative take on dairy, creating premium products from natural produce.

Until 2020, she helped build The Collective in Auckland, moving from marketing director to general manager. After private equity firm Pencarrow invested, she was asked to take over the UK side of the business, so packed up her three children and husband and returned to London in 2020, where she lives in Beaconsfield, Buckinghamshire.

The Collective is a New Zealand-owned business, but its products, available across all major supermarkets in the UK, are produced with milk supplied by British farms.

"We are exporting IP from New Zealand, in a very New Zealand industry, dairy."

Gourmet yoghurt, smoothies and kefir are sold in bright packaging with a signature (no) bull logo, and stand out on the shelves. But they are a mere 2.5 percent of the \$3.7 billion yoghurt market in the UK, although nearer 20 percent of the children's market.

The past year has seen double-digit growth in the UK, but Sarah is just as passionate about growing the brand's ethics and purpose. The Collective is a B Corp company, verified to meet high standards of social and environmental impact. A few years ago, it introduced its first carbon-neutral yoghurt, and it aims to fully reach carbon-neutral status by 2025.

"We are going to do it better and hold ourselves to higher standards. Dairy is a huge market here and we are a pioneering part of it. I want our people and purpose at the forefront."

"They wanted people with experience, but not indoctrinated by corporate life."

– Sarah Smart, The Collective UK general manager

SUNNY DISPOSITION

Art

Linda Tyler explores another artwork from the University collection.

Like they did with Phar Lap and the pavlova, Australians are inclined to claim New Zealand artists as their own, even those who emigrated as older adults, such as Rosalie Gascoigne. An inspiration to late bloomers everywhere, Rosalie was 64 when, in 1981, she was chosen as the first female artist to represent Australia at the Venice Biennale, an achievement made even more remarkable considering her first exhibition had been in 1974 at the age of 57.

Despite her delayed start, Rosalie had a stellar international art career lasting 30 years before her death, aged 82. Her chosen medium was assemblage using found materials. She wrestled huge sheets of corrugated iron, heavy metal signs and countless logs of driftwood onto the roof rack of her station-wagon to cart home and transform in her suburban studio.

Born in Auckland in 1917, Rosalie Norah King Walker grew up in Remuera and went to Epsom Girls' Grammar where her mother taught. She once said it was her gold gym smock that imbued her with a lifelong love of the colour of pineapple, daffodils and wattle. She graduated with a BA in English and Latin from Auckland University College in 1939, and taught at Whangārei Girls' then Auckland Girls' Grammar before marrying fellow Kiwi, astronomer Ben Gascoigne in 1943. Although she left New Zealand when she was 26, she made regular visits home.

Living near Canberra, close to the Mount Stromlo Observatory where Ben worked, was isolating but inspired her as an artist. She started with quilting, gardening and dried flowers before training her three children to scavenge wood, stones and bones for her experimental arrangements. Deploying wood, weeds and wildflowers, she became an acclaimed proponent of the Sogetsu school of ikebana. "I know I can't draw," she would say. "But I can arrange."

Moving to the suburbs, she started to teach others how to fling materials together with flair, and was commissioned to create displays to impress visiting government dignitaries.

By the early 1970s, when the junk aesthetic of Pop Art was gaining ascendancy and Italian Arte Povera was appearing in art magazines, Rosalie ventured into the art world. The material she used most was what she called "drink crate wood"; dismantled broken boxes collected from outside the soft-drink factory at Queanbeyan. The yellow and black painted wood had often been damaged by the elements and she wanted to



capture this fading, bleaching and warping. The sun hits you like a hammer, she remarked, and bakes the Monaro, a tableland south of Canberra where all trees were felled in the 19th century during pastoralist expansion. Occupied by Aboriginal people for 700 generations and white settlers for just 150 years, Australia, she said, was an epic conjunction of nature and culture that needed to be celebrated for its beauty through a type of art that could evoke boundless space.

Here, the black numbers and text – Schweppees, screw-top, 32 – are shadow to the sunshine. The wattle and daub construction, where wooden uprights woven with horizontal twigs and branches are then daubed with clay to make a building weatherproof, is suggested by the lengthwise yellow and black patterned warp and slimmer light-brown wood wefts. Her title also denotes a construction technique deployed by early colonial settlers, as well as Australia's national floral emblem, the golden wattle.

Rosalie's genius was in her transformative construction processes, making labour-intensive yet deceptively simple-looking work. A lover of words as well as images, she scrambles numerals and text to make it abstract, conjuring up the idea of art as a universal language while holding onto pop culture references. Her talent led to major exhibitions, and she was made a member of the Order of Australia for service to the arts in 1994.

Rosalie Gascoigne (1917-1999), *Wattle and Daub*, 1992, sawn and split soft-drink crates on plywood, 715 x 650mm

Art historian Linda Tyler is the David and Corina Silich Associate Professor in Museums and Cultural Heritage at the University of Auckland.

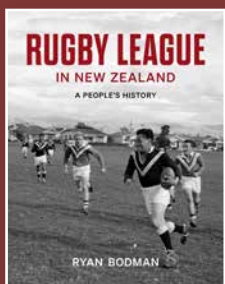
See pieces in the University's collection at artcollection.auckland.ac.nz



Ryan Bodman's research skills were developed at the University.
Photo: William Chea

"I wanted to write in a similar way to how our grandad spoke to us as kids ... as a storyteller."

— Ryan Bodman, historian



WIN THE BOOK
We have one copy of Ryan's book to give away. Email: ingenio@uckland.ac.nz with League in the subject line and your name and address in the body. Entries close 1 December.

LEAGUE'S HISTORY MORE THAN A GAME

Ryan Bodman's book on the history of New Zealand rugby league also tells the story of this country's post-war culture. By Denise Montgomery

Ryan Bodman's book *Rugby League in New Zealand: A People's History* traces the journey of the 13-player game since its introduction to the country in 1907. Although league fans will enjoy it, maybe not quite as much as they would have enjoyed the Warriors making it to the NRL grand final, Ryan's research into the sport's wider cultural significance unearths intriguing insights into the nation's past that will appeal to a greater audience.

Ryan, who works as a freelance historian, conceived this book after completing his MA in history at the University of Auckland in 2012.

"My thesis was a study of trade unions post-Second World War and it included oral histories from across Aotearoa," he says.

"I was talking to these guys about their lives, and rugby league kept popping up."

Rugby league originated in England after a split with rugby union because of player payments. Its popularity in New Zealand unfolds as a David versus Goliath struggle against rugby union. As an example, in 1911 when word reached the Nelson Rugby Union (NRU) that Stoke Industrial School wanted to offer league, the hazards of professionalism were held up as a concern. The NRU secretary wrote: "I would point out that no school, private or public – college or university – has embraced this professional game, recognising in it a grave danger to youth by encouraging a professional spirit in sport."

This attitude informally permeated education policy, with a delegation of league representatives in 1922 addressing the Minister of Education to combat prejudice against the game.

The same year, the New Zealand Rugby Union demonstrated almost bullying behaviour to stop league's rise, telling Māori, "The league game will pollute your minds."

Despite this, league flourished. At the University of Auckland in 1957, the late Bob Dragicovich helped establish the Auckland University Rugby League Club. Auckland Bob had done a DipPhEd in Otago and set up the first NZ university league club there in 1953, then one at Canterbury in 1956. In Ryan's book, former NZRL president Gerald Ryan said having University of Auckland students play league was "almost heretical". "It was unheard of for the University to play league."

But it happened, although the University club did become defunct eventually, with league clubs amalgamating over time.

Ryan's book has rebellious history at its heart, which aligns with his own activism.

"I'm very interested in power and that drives my study of history."

He'd wanted his book to be academically credible but also publicly accessible, so he needed the views of regular people.

"My purpose is to encourage excitement and engagement with knowledge. I'd come across Dr Michael Stevens' Facebook page, 'A World History of Bluff', that made me aware of the potential value of social media to promote public engagement with my research."

Ryan created the 'Rugby League: a New Zealand History' Facebook page, which was also a good way to identify some of the people in photos he'd uncovered.

"I wanted to write in a similar way to how our grandad spoke to us as kids... as a storyteller, narrative driven, so that you read it and wonder what's going to happen next."

Ryan spoke with working-class communities, Māori, Pacific migrants – basically, people from all walks of life involved in league.

"So, while the book has a single story, it's driven by all these little stories. I almost became spiritual in the process as, in a crazy way, the book almost wrote itself."

Ryan is thinking about a PhD and has a personality trait that serves research well.

"I'm an obsessive person, which has plagued me, but as a researcher it's fine. I don't leave any stone unturned. I now think of it as a gift."

He adds that he couldn't have written this book without his time at the University.

"The postgraduate seminars with people like Dr Deborah Montgomerie and Professor Caroline Daley helped refine my thinking around national identity. All that groundwork was laid at the University."

His likely doctoral topic is the alcohol industry in New Zealand. As he's a stay-at-home dad of two, his research interest also looks to their future. "Alcohol has a cultural power and the industry attaches itself to our identity as a nation. It makes money out of profound suffering in communities, so how is it a respectable element of our society?"

***Rugby League in New Zealand: A People's History*, Bridget Williams Books, \$60**

Finger on the pulse of thrillers

Doctor turned crime writer Fiona Sussman talks to Geraldine Johns about how her careers connected.

Were it not for Stirling, Fiona Sussman may not have turned to a life of vice. But an invitation to appear in the UK town at Bloody Scotland – an international crime-writing festival – led to pastures new in her literary career.

Until then, Fiona had not seen herself as a writer of any particular genre, but Bloody Scotland is devoted to crime-writing, and she had been invited after her book *The Last Time We Spoke* won the Ngaio Marsh Award for Best Crime Novel in 2017.

“I’d always thought *The Last Time We Spoke* was about social justice, but after the festival I was lured to the darker side,” Fiona laughs.

This begat her fourth novel, *The Doctor’s Wife*, a psychological thriller that is a true page-turner. It’s also the first of Fiona’s books to be set against a medical backdrop, and is shortlisted for Best Crime Novel in the 2023 Ngaio Marsh Awards. In November, Fiona will appear at BAD, the Sydney Crime Writers Festival, as a panellist.

Raised in South Africa, Fiona emigrated to New Zealand in 1989 and completed a Bachelor of Medicine and Surgery at the University of Auckland in 1992.

“Some of my career trajectory has evolved in response to circumstance,” she says of her original decision to step out of her general practice career to spend more time with her children. That was in 2003 and the break was meant to be just one year.

“I loved medicine. I was very passionate about it and was quite conflicted when I stepped away.”

Fiona did her student elective in oncology at Auckland Hospital’s department of oncology and appreciated the guidance there of Dr Vernon Harvey with “his immense knowledge, humanity and humour”. The “inspiring teaching styles” of forensic pathologist Dr Timothy Koelmeyer and orthopaedic surgeon Michael Caughey also had a huge influence on her studies.

During her medical leave of absence, Fiona

realised she had been missing a creative outlet. Writing then became a full-time career for the daughter of a publisher. She now has a Master of Creative Writing and has written four books and many short stories, winning multiple awards along the way. Fiona, who lives on Auckland’s North Shore, has not practised medicine for 20 years.

She says there are certainly similarities between medicine and a literary career.

“I came to medicine and to my writing with the same desire: to impact positively on society.”

As a child, Fiona remembers waking early and making herself a peanut butter sandwich before settling into a good pre-breakfast read. The habit of reading is one she wishes to foster.

“We absolutely need to do everything we can to promote books and reading to our young people – supporting and funding libraries, school programmes and parent endeavours to this end,” she says.

“No matter the medium – be it physical books, e-readers, audio books, or graphic novels – reading allows us to see the world through another’s eyes, enhancing our empathy and understanding of others.”

It sounds like the ideal prescription – the pursuit being: “Something that affords meditative respite from the often cruel and self-serving aspects of social media.”

The Doctor’s Wife is set in Auckland’s East Coast Bays, not far from where Fiona did her rural placement as a student, working under Dr Andrew Murley at the Waiake Medical Centre, an “incredibly rewarding experience”, she says. She subsequently joined that practice as a GP.

Her career in medicine taught her a lot about human nature, something that shines through in her characters. As readers do with any good crime novel, we find our own favourites. Fans of the brilliant detective duo of Ramesh Bandera and Hilary Stark, who debuted in *The Doctor’s Wife* and who have their own complicated backgrounds, will be glad to see them reappear in her next book, which is under way.

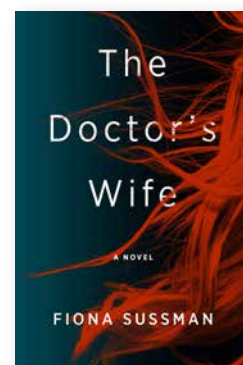
Fiona maintains a disciplined approach to writing, and although she develops her characters to such a degree that they would be recognisable were they to walk through the door, she does make a point of closing that door when she closes her laptop at day’s end.



Fiona Sussman says reading enhances empathy.

“I came to medicine and to my writing with the same desire: to impact positively on society.”

– Author Fiona Sussman, MBChB



The Doctor’s Wife, Bateman Books, \$38

HOOKED ON TROUT TALES

A new book by law alumnus Grant Henderson uncovers snags of conflict on one of our best-known trout rivers. By Anthony Doesburg



As that most-quoted of all angling philosophers, Unknown, famously said, “A bad day of fishing is better than a good day at work.” But who knew conflict was also a feature of this apparently contemplative pastime?

Grant Henderson, author of a history of what he calls our greatest trout river, the Tongariro, discovered contention wherever he looked.

An alumnus of Auckland Law School who was at the University from 1971 to 1975, Grant is a retired income tax specialist at a legal publishing house. He has written an exhaustive account of the trout fishery on the waterway that flows from the slopes of Mt Ruapehu to Lake Taupō.

As he notes in the preface to *Fishing the Tongariro: A History of Our Greatest Trout River*, his research uncovered “conflict between people in the Taupō region ever since Europeans first arrived, conflict between fish species as the introduced trout took over and decimated the native kōaro, conflict between brown and rainbow trout as the latter became the favoured sports fish”... to mention a few of the arguments.

However, all of that just contributes to a gripping fishing yarn.

Numerous attempts were made to establish a Taupō trout fishery from the late 1800s, finally being deemed a success about 1900. Brown trout initially made the lake and its tributaries home, but their unwillingness to rise to a fly – they will eat just about anything else including rodents – led to ongoing efforts to introduce rainbow trout.

The first official catch of a rainbow trout in the lake on a rod and line was in 1904, and within a few years overseas anglers were flocking to the region. The fish they hauled out were so big that, in 1908, Welshman Major Rhys Jones put a Tongariro-caught rainbow on ice and sent it back to the UK so his disbelieving peers could see it in all its 7.7kg glory.

The Major Jones pool named after him is one of the river’s most popular fishing spots.

Grant writes that, from the outset, British

settlers were “determined to make the New Zealand countryside a mirror image of England when it came to game animals”, releasing “all manner of mammals, birds and fish” in competition with Indigenous species.

We know which species won. Within a couple of decades, a native grayling – a type of salmonid – had been wiped out and kōaro, large populations of which lived in Lake Taupō and fed local Māori, survive mainly in the headwaters of streams, out of reach of trout thanks to their ability to climb waterfalls.

Grant says questions would be asked these days about such a thoughtless approach to species introduction.

He is clear about the main contemporary environmental challenge facing waterways.

“The big thing nationally for our trout rivers is water quality.”

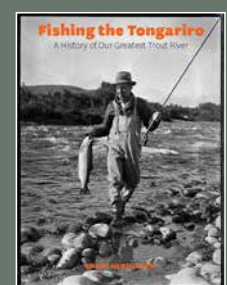
Intensive dairying is one culprit, and Canterbury is especially hard hit. In contrast, Grant says the Taupō fishery, which employs hundreds of people, is well managed. “They’ve realised in Taupō that whatever you stick on the ground eventually flows into the lake, then flows down the Waikato River and out to sea.”

A flick through his book’s index reveals numerous references to angler Robert Jones. Readers with longish memories might go hunting for an account of the incident in which Wellington property developer and eager angler Bob Jones punched TVNZ reporter Rod Vaughan on the nose for disturbing an afternoon’s fishing on the Tongariro. However, the Bob Jones referred to in the book is a different man who, in 1906, caught an 11.5kg brown trout and subsequently had holes on two Taupō rivers – the Waitahanui (where Grant also caught his biggest trout to date, a 5.5kg rainbow) and Tongariro – named after him.

Grant says space limitations stopped him writing about the 1985 punch that reverberated around the nation.

“If I ever do a second edition, I may include it in a chapter on riverside disputes,” he says.

Grant Henderson has written a history of what he calls our greatest trout river, the Tongariro.



HOOK ONE

We have one copy of *Fishing the Tongariro* (Bateman Books, \$60) to give away.

Email: ingenio@uckland.ac.nz with Fishing in the subject line and your contact details in the message. Entries close 1 December.

ARTS LAUREATES



Professor Annie Goldson (Faculty of Arts) was named a 2023 Arts Foundation Laureate in August. Annie won the \$35,000 Dame Gaylene Preston Documentary Film

Makers Award from the New Zealand Arts Foundation Te Tumu Toi, awarded to an outstanding documentary filmmaker.

A lecturer in communication and screen production, Annie has more than 12 award-winning films to her name. Her latest film, *Red Mole: A Romance*, a documentary about the radical 1970s New Zealand theatre troupe, is appearing in selected cinemas around the country in November.

“Whatever medium you work in, making art can feel a long, at times arduous journey, so to receive this honour is awesome,” Annie said. “And a shout-out to Waipapa Taumata Rau and its recognition of my films as my research. University support has allowed me to make the kind of work I’ve always wanted to.”

Alumnus Robert Jahnke (Master of Fine Arts) was one of the other eight laureates. The sculptor and arts educator received the Jillian Friedlander Te Moana-nui-a-Kiwa Award. **Full story:** auckland.ac.nz/annie-laureate

HIGH NOTES



When opera singer Tayla Alexander graduated in September with a Bachelor of Music (Hons), it capped off a remarkable couple of years.

The 22-year-old has signed a multi-million-dollar production deal to record an album and has headed to Europe to work on it. It came about after German producer Daniel Loitz discovered a video of Tayla and her dad Dwayne singing a cover of Elvis Presley’s ‘Love Me Tender’ during the Covid-19 lockdown in 2020. It was recorded as a tribute to her grandad, who’d been diagnosed with cancer.

“Dad and I were sitting in our study, and decided to do karaoke on his computer,” says Tayla. “My grandfather was told he had a short time left. We were in the pandemic and not allowed to see him, so wanted to do something to cheer him up. The love of music in my family comes from him.”

Tayla will record an album of schlager music – a style of European crossover pop music – which will be mastered at Abbey Road Studios in London. As part of the deal, Tayla will also get to record a duet with her dad.

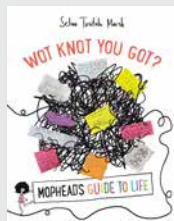
Full story: auckland.ac.nz/tayla-music-grad



Remember Me

Award-winning author and editor Anne Kennedy makes memorising poetry easier with this collection of poems by New Zealand writers. It includes poems by honorary alumnus, the late Hone Tūwhare, as well as Professor Selina Tusitala Marsh (Faculty of Arts).

Edited Anne Kennedy, AUP, \$45



Wot Knot You Got? Mophead’s Guide to Life

A book for readers from eight to 80 in which Selina Tusitala Marsh’s character Mophead helps people through their ‘knotty’ problems. This is Selina’s third children’s book starring Mophead. She is a renowned Pacific poet and professor in the Faculty of Arts.

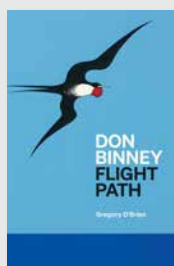
Selina Tusitala Marsh, AUP, \$30



Gordon Walters

A study of 20th-century artist Gordon Walters by Francis Pound, who was in the art history department for many years. For decades he traced the work of Walters (1919-1995) for this book. After Francis died in 2017, his close friend, art historian Dr Leonard Bell, stepped in to complete the work on his behalf.

Francis Pound, AUP, \$90



Don Binney: Flight Path

Arts alumnus Gregory O’Brien has created a large-format 400-page monograph about artist Don Binney. Binney (1940-2012) was an alumnus and staff member, and his stylised depictions of birds feature prominently in artworks held in the University’s art collection.

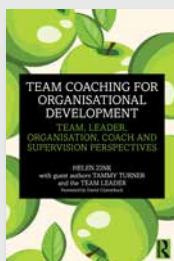
Story: auckland.ac.nz/don-binney-book-launch
Gregory O’Brien, AUP, \$90



Hiwa: Contemporary Māori Short Stories

Edited by Associate Professor Paula Morris (Faculty of Arts), *Hiwa* features contemporary Māori short stories by 27 writers working in English or te reo Māori. Alumni included are Jack Remiel Cottrell, Kelly Ana Morey, Shelley Burne-Field and Pamela Morrow.

Story: auckland.ac.nz/paula-morris-hiwa
Edited Paula Morris with Darryn Joseph, AUP, \$45



Team Coaching for Organisational Development

Helen Zink has a MBA from the University and is now a growth, leadership and team coach in business. In this case study, she tracks the development of a team through five viewpoints over three years, exploring the concepts of collective leadership and teamwork.

Helen Zink, Routledge, \$63



WIN: We have one copy of *Remember Me* and one of *Wot Knot You Got?* to give away, thanks to Auckland University Press. Email: ingenio@auckland.ac.nz with the book name in the subject and your postal details in the body. Entries close 1 December 2023.

CONNECTION POINTS



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



NOMINATE

STAND-OUT ALUMNI

As you would have read on page 28, every two years the University of Auckland selects 40 alumni under 40 years of age, based on their demonstrated contributions to their profession, community and the University. They're selected for their impact in six categories: Business Leaders, Entrepreneurs, Influencers, Disruptors and Innovators, Performers, and Humanitarians. Read the stories of all 2023 awardees online and nominate more for future selection at auckland.ac.nz/40-under-40.



HELP OUT

INTERNATIONAL STUDENTS

If you're based in Tāmaki Makaurau Auckland and have at least three years' work experience, you could support our international students through the University's Workplace Insights Programme.

By sharing your career journey and experiences, you can help provide a deeper understanding of the New Zealand work environment and culture. With a commitment of just ten hours over three months, this is a relatively easy introduction to mentoring. Fill in the form at auckland.ac.nz/WIP and we'll be in touch with details of the next programme.



MENTOR

FOR 30 MINUTES A MONTH

The University's informal mentoring platform, Alumni Connect, has nearly 2,500 members keen to connect with students and graduates. Share your career insights with current students and exchange industry advice with fellow alumni through our online platform. In just 30 minutes you can make a difference to a student's study experience and future career. Head to auckland.ac.nz/alumni-connect for more information and to sign up.



VIEW

OUR NEWEST ELAM ARTISTS

Explore work of graduates from Te Waka Tūhura Elam School of Fine Arts and Design. The Elam Artists Graduate Show runs 24-26 November at 20 Whitaker Place. You can also view an incredible online showcase and get more info at their website elamartists.ac.nz.

Image: Susu 蘇子誠 (BFA Hons), Terrestrial Analogue, installation view, Elam Artists Graduate Show, 2022.

Photo: Marco Hidalgo



WITH ALUMNI IN YOUR HOMETOWN

The University of Auckland alumni community is truly global. To ensure our international alumni can connect with other graduates, and take up relevant opportunities, we rely on an invaluable network of Volunteer Alumni Coordinators (VACs). If you're interested in finding out more about becoming part of our VAC network, get in touch: alumni@auckland.ac.nz



OUR VIRTUAL BOOK CLUB

Keen to broaden your reading repertoire? Join our online book club and connect with more than 800 people who share your love of literature. You'll discuss up to five books a year with other readers across the University community. It's free to join and book club members receive a 15 percent discount on selected books from the University bookshop, ubiq. Find out more at auckland.ac.nz/bookclub



THE UNIVERSITY JOB BOARD

Top employers from around Aotearoa are looking for graduates and they're registered on the University's job board – NZUni Talent jobs. If you graduated in the past three years, you can access the board and use the free career tools and services provided by the University's Career Development and Employability Services (CDES) team by logging into your MyCDES+ platform at auckland.ac.nz/MyCDES-job-board.



IN PRINT OR ONLINE?

Want to keep receiving *Ingenio* in the post? In the interests of sustainability, we are printing fewer copies but want to make sure the ones we do print go to people who prefer to read a hard copy. **Please scan the QR code on the form that came with this magazine** and update your preference online. Or complete the form by hand and return it in the reply-paid envelope.



BE IN TO WIN

A SAMSUNG GALAXY WATCH BY UPDATING YOUR DETAILS

If you don't use your old @aucklanduni.ac.nz much any more, let us know your preferred email address so you can receive exclusive offers. If you update before 29 February 2024, you'll automatically go in the draw to win a Samsung Galaxy Watch 5. We have six to give away. Head to alumni.auckland.ac.nz/update to let us know your details.

Print or digital?

Tell us which version of *Ingenio* you prefer to read.



We're printing fewer copies of *Ingenio*, so you need to let us know if you want to keep receiving a printed magazine. Please use the QR code on the enclosed form or fill out the form and return it in the reply-paid envelope to let us know your preference.



UNIVERSITY OF
AUCKLAND
Waipapa Taumata Rau
NEW ZEALAND

140
YEARS