WAIPAPA TAUMATA RAU, UNIVERSITY OF AUCKLAND

# Ingenio

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ALUMNI MAGAZINE

AUTUMN 2023

## STEPS WE CAN TAKE *TO SAVE OUR SEAS*

Alex Casey: giving up social media

Ted Baker: 20 years on from the first *Ingenio*

Tributes to Stuart McCutcheon

# BIG PICTURE

# *NASA STARS ON CAMPUS*

**NASA's Deputy Administrator Pamela Melroy and Administrator Senator Bill Nelson at a media conference at Te Pūnaha Ātea, the Space Institute, at the University in March. (Read about their visit on page 7.)** Photo: Chris Loufte

# this issue



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*REGULARS*

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**Cover image:**
Diving from *Te Kaihōpara*
Photo: Brady Doak

**Editorial**

# WE'RE ALL IN THIS OCEAN TOGETHER

*Oceania is vast, Oceania is expanding, Oceania is hospitable and generous, Oceania is humanity rising from the depths of brine and regions of fire deeper still, Oceania is us. We are the sea, we are the ocean.*
**– Professor Epeli Hau'ofa**

There is a deep and inseparable connection to the environment and the cosmos for Pacific peoples beyond that of simply belonging. Our natural surroundings are embedded in the Pacific psyche and ways of knowing, doing and being.

The Pacific Ocean, a living entity, has been an integral part of the beliefs and cultures of Pacific peoples for eons. It is often seen as having its own spirit and consciousness: a life source deemed a powerful deity or divine force.

Many Pacific creation stories tell how the ocean was formed and how it shapes the world around us. This connection has led to a strong ethic among many, who view the ocean as a 'measina', a taonga, a treasure to be protected and preserved. Our environment was never meant to be feared, but respected and embraced.

In this *Ingenio*, we look at work by our research community to preserve life around our marine environment. We have scientific knowledge, but wider thinking is also required.

A recent Health Research Council study I led examined the nexus between climate change, mental health and well-being and its impact on Pacific peoples, specifically garnering the world views of those living in the Cook Islands, Niue and Christchurch.

The results underscore the relevance of climate change for Auckland, particularly in light of recent climatic events that had a significant and ongoing impact.

It is essential to consider and address intangible effects, such as the impact on mental health and well-being, and the repercussions of death, displacement and decimation of marae, for example.

Impacts, both tangible and intangible, do not discriminate and all require our comprehensive attention and action. It would be difficult to deny that the Auckland floods and Cyclone Gabrielle were climate-change related. But dealing with climate change requires more than simply reducing carbon emissions. It involves advocating for climate equity and justice, as exemplified by climate-change warriors across the Pacific where, despite contributing less than 0.03 percent of the globe's overall greenhouse gas emissions, the region is highly susceptible to its detrimental effects.

Nevertheless, the Pacific region is dedicated to transitioning towards a low-carbon economy. And this includes Waipapa Taumata Rau. One of our goals is to move towards being a sustainable university by 2030 (read more at: **auckland.ac.nz/sustainability-strategy**).

We have responsibilities and ties to neighbouring Pacific countries and it is our duty to maintain these alliances, but political commitment is critical. We need a government that recognises the value of preserving Aotearoa, our cities, our universities and our ocean. We must evolve beyond our conventions and comfort zones. Having a one-dimensional perspective is not beneficial; being open to a multiplicity of world views will enhance our understanding of the environment.

How frequently have our Pacific neighbours experienced environmental calamities? Being prepared and resilient in the face of disasters is almost part of their DNA.

Indigenous knowledge systems of innovation, adaptation, mitigation and preparedness all exist from which we could learn.

Because ultimately, as I-Kiribati African American poet and scholar Teresia Teaiwa wrote, "*We sweat and cry salt water, so we know that the ocean is really in our blood.*"

**ASSOCIATE PROFESSOR JEMAIMA TIATIA-SIAU**
Pro Vice-Chancellor Pacific
Waipapa Taumata Rau, University of Auckland

# FIVE OF THE BEST

## The University recently celebrated a group of exceptional alumni

An inspiring ceremony at the ASB Waterfront Theatre on 1 April recognised the achievements of five alumni of Waipapa Taumata Rau, University of Auckland.

At the end of the 2023 Distinguished Alumni Awards Taumata event, interviewer Jack Tame expressed it well when he said, "I now feel extremely insignificant." That's because each winner has achieved so much, yet all exhibit humanity, humour and passion for their careers.

Vice-Chancellor Professor Dawn Freshwater says the Taumata ceremony is one of her annual highlights. In the University's 140th year, she said she'd been reflecting on its community.

"Communities are at their best when taking compassionate action in the service of those around them, such as we've seen through the floods and cyclone, to support people who endured significant loss."

She said the awardees have all made "a world-changing impact" on their communities.

**Meet the 2023 Distinguished Alumni on page 33.**


*Above: The Distinguished Alumni chat with interviewer Jack Tame.*
*Below: Vice-Chancellor Professor Dawn Freshwater at the Taumata event.*

# NASA TOUCHES DOWN ON CAMPUS

## Space students and staff thrilled by NASA chiefs' visit to campus

The University hosted two top NASA representatives in March. Senator Bill Nelson, who holds the top job of administrator of NASA, and deputy administrator Pamela Melroy were hosted by Te Pūnaha Ātea, The Space Institute and presented to students and researchers.

Both NASA leaders have been to space, Senator Nelson as a payload specialist and Melroy as one of only two women to command Space Shuttle missions.

The pair visited Waipapa marae before heading to the Faculty of Engineering's Unleash Space, welcomed by Deputy Vice-Chancellor Research, Professor Frank Bloomfield.

Senator Nelson said the curiosity and drive to explore that led Pacific peoples, including Māori, to journey across the Pacific, were shared in a quest to learn more about space, the planets and eventually beyond to 'distant cosmic shores'.

Melroy noted that New Zealand was one of only five nations in the world capable of launching rockets into space. "It is great to have New Zealand as part of this golden age of space exploration."

Nelson said the space agency was keen to see Kiwi graduates take up NASA internships. The pair were also at Parliament where postgraduate geology student Michaela Dobson was awarded a NZ Space Scholarship to NASA's jet propulsion laboratory. "It's cool to show the door is open for sciences like geology, not traditionally seen as important for space research," Michaela says.

**Full story: auckland.ac.nz/nasa-on-campus**

*Senator Bill Nelson talks about space at Waipapa marae.*

News

# $70M TO BOOST RNA RESEARCH

## Opportunities for novel therapeutics and vaccines to be developed

A collaborative approach between universities, an independent research institute and government will see research into the potential development of new vaccine technologies. The University is co-hosting a government-funded Ribonucleic Acid (RNA) Development Platform alongside Victoria University of Wellington. The platform is supported by the Malaghan Institute of Medical Research and the University of Otago, with Dr Kjesten Wiig of the Malaghan Institute and Professor John Fraser of Waipapa Taumata Rau, University of Auckland as the interim co-directors.


RNA technologies played a key role in the development of Covid-19 vaccines and this breakthrough created significant opportunities for the technologies to be used in novel therapeutics, diagnostics and vaccines. These technologies will have application in other fields, too, including animal health and agriculture.

Initial funding of $500,000 will allow the RNA Development Platform team to prepare a seven-year research plan. A further $69.5 million over seven years will be added to support capacity and capability building in the sector. Funding is administered by the Ministry of Business, Innovation and Employment under its strategic science investment fund. The platform will involve RNA researchers from around the country working together.

"Having our leading research institutes and companies working towards a shared goal of building this important technology in Aotearoa is a great opportunity," says John.

*RNA technologies played a key role in the development of Covid-19 vaccines.*

# OUTSTANDING TALENT TO BE MENTORED

## Kupe scholars have the potential to become transformational leaders

Another talented group of Kupe Leadership Scholars was announced in March at a special event at the Business School.

Research interests are wide and varied among the 18 students, who include Master of Public Health student Ariana Andrews (Waikato-Tainui, Te Whakatōhea), who wants to improve health and well-being for Māori.

"I saw this pattern in the disproportionate numbers of Māori who entered hospital, often at a later stage of disease, frequently feeling alienated by the clinical environment. I want to work with others to make a change to environments and circumstances that are disproportionately making our people unwell."

Over the year, the students will benefit from many experiences designed to enhance their leadership skills and broaden their perspectives, including one-on-one mentorship. Each scholar is paired with a leader in the student's field of interest. The mentors provide guidance, support and advice, as do the network of Kupe alumni.

The Kupe scholarship programme was founded by Canadian philanthropists John and Marcy McCall MacBain and supported by domestic and international donors. It is now in its fifth year. The University also acknowledges the passing in March of Geoff Ricketts, chair of the University of Auckland Foundation, who sponsored a number of our Kupe leadership scholars over the years.

*The 2023 Kupe Leadership Scholars. Ariana Andrews is standing to the right of the statue, in a blue cap.*

# Rett syndrome drug born at UoA

## The US FDA approves a drug with University of Auckland connections

A drug approved by the US FDA had its molecular discovery in a University of Auckland lab led by Distinguished Professor Dame Margaret Brimble. The initial work involved a wide scientific team including Professor Sir Peter Gluckman, Associate Professor Jian Guan and Professor Mike Dragunow, with postgraduate students. They discovered the chemical structure of NNZ-2566, the molecule that led to the drug Trofinetide, which was then 20 years in development. Originally they were trying to design a drug molecule for traumatic brain injury through University spinout NeuronZ, which later became Neuren Pharmaceuticals. Scientists then had success in trials on patients with Rett syndrome. Rett has symptoms similar to cerebral palsy or autism and affects around one in 10,000 girls. Neuren partnered with Acadia Pharmaceuticals to get the drug over the line after many years.
**Full story: auckland.ac.nz/rett-drug-approved**

*Dame Margaret Brimble has followed the clinical trials involving Rett patients with great interest.* Photo: William Chea

# MĀORI BUILDING METHOD REVIVED

## Traditional construction technique proven to withstand earthquakes

Experts from the University are using their practical research to see how they can rebuild a historic Ōpōtiki whare tīpuna (ancestral house).

Professor of Architecture Anthony Hoete used an ancient Māori construction technique called mīmiro to test reconstructing the whare Tānewhirinaki, built in the 1870s using mīmiro. The method involved timber compression elements that interlocked without bolts. These elements were then post-tensioned by ropes that were tightened to strengthen the building, pulling the structure to the ground like a tent.

Anthony worked with architectonic researcher Dr Jeremy Treadwell on a version of the frame using digitally cut timber elements and sailing equipment. "Our seismic tests on the site showed this structure can withstand much stronger earthquakes than the one that caused critical damage to the original wharenui in the Napier earthquake in 1931," says Anthony.

He says the origins of mīmiro can be traced back to ships and the strong sail lashing that his ancestors used to travel across the Pacific.

"They had a deep knowledge of building and creating strength and tension in structures, so we have recreated those lost techniques."

The project was funded by the Earthquake Commission and other supporters. The goal for Ngāti Ira o Waioweka iwi is to have the wharenui restored in three to five years.
**Read more: tinyurl.com/Hoete-build-RNZ** and **tinyurl.com/Hoete-newshub**

*Below left: The timber portals use interlocking compression joints, strengthened by ropes. Right: Professor Anthony Hoete*

Cover Story

# PUSH TO SAVE OUR *SEA LIFE*

**The sea. We eat from it. We swim in it. We just sit and look at it. Creatures eat from it and try to survive in or near it. But preserving the delicate balance of life in under-threat marine ecosystems takes effort. Owen Poland talks to University of Auckland scientists about their efforts to protect this precious environment for future generations.**

Whether it be the whales that swallow millions of microplastics every day in the Hauraki Gulf or the giant sea sponges that have melted off reefs in above-average sea temperatures, there are many signs our marine environment needs help.

"We're in a biodiversity crisis, we're in a climate crisis, we're in a sustainability crisis and we're getting close to 10 billion people on the planet," says Simon Thrush, a professor of marine science and the director of the University of Auckland's Institute of Marine Science.

New Zealand has about 18,000 kilometres of shoreline, with more than 300 estuaries or harbours, plus an exclusive economic zone that measures 1.3 million square nautical miles.

"We're very closely tied to our coastal oceans culturally, recreationally and economically, we see value in the natural environment, and for many people, the best chance we have to easily get into nature is to dive into the water."

Professor Rochelle Constantine has spent the past 30 years observing the behaviour of large marine species like whales, dolphins and sharks and is better placed than most to observe the changes in their numbers.

Rochelle says what were once considered 'anomalously warm years' have now become commonplace. She says there are serious consequences to having had three consecutive La Niña weather cycles, which have pushed up sea temperatures by more than five degrees Celsius in places.

Mega-fauna like the sei whale or Bryde's whales can survive and thrive because of their ability to move large distances and change their diet, but it's not so easy for smaller cetaceans like

*Professor Rochelle Constantine says smaller cetaceans like dolphins, whose prey have moved further out into the Hauraki Gulf as temperatures rise, will struggle.*
*Photo: Chris Loufte*

dolphins, whose target prey have moved further out into the Hauraki Gulf as temperatures rise.

"If you have less flexibility in your diet or less ability to capture prey, then you are more likely to be compromised by climate change," says Rochelle. Further down the food chain, sea sponges are also feeling the heat. In Fiordland, millions of sponges were subjected to mass bleaching when sea temperatures rose by five degrees above normal over the past two summers – although many have recovered their colour since temperatures fell.

Stretching across 4,000 square kilometres are the glittering waters, islands, fisheries and beaches of the Hauraki Gulf. There, marine heatwave conditions averaging two degrees above normal were recorded for all but two months of 2022 and resulted in widespread sponge necrosis (death of cells) among the *Ancorinidae* species, which can measure up to two metres wide and a metre long.

"We're talking about massive marine organisms that are suffering," says marine scientist Dr Arie Spyksma, a research fellow based at the University's Leigh Marine Laboratory.

To better understand the underlying causes, Arie has tapped into funding from his Live Ocean Foundation research grant to run lab tests, which appear to confirm that the sponge necrosis is temperature driven.

What's encouraging is that tissue heals over as temperatures cool, but if the ocean continues to warm he says, "It's potentially going to be a more frequently occurring event that might lead to worse outcomes for the sponge communities than if it was just a one-off."

*Marine scientist Professor Simon Thrush would like to see decisive action like the declaration of rahui (bans) by many iwi and hapū to protect the likes of depleted scallop beds.*
*Photo: James Fyfe*

**"The loss of vitality and abundance of many of these species of big animals has happened without us really noticing."** – Professor Rochelle Constantine, Faculty of Science

## PULSE OF THE GULF

Long recognised as a global hotspot for mega-fauna diversity, the Hauraki Gulf has become a giant laboratory for the multifaceted Pulse of the Gulf project, which has attempted to unlock some of its ecological secrets – especially during what's called multi-species feeding associations or 'work-ups'.

Since 2019, researchers have conducted more than 45 field trips using behavioural observation, drone footage and acoustic data to better understand the interactions between various species of marine mammals, seabirds, sharks and their prey.

Eight different communities were identified, but Rochelle says the ecosystem changed when Bryde's whales switched their diet from small ▶

*Dr Arie Spyksma is a research fellow based at the University's Leigh Marine Laboratory. He says sponge life is suffering in the warmer oceans.*
*Photo: Chris Loufte*

**RESEARCH VESSEL**

The University's multi-million-dollar marine research vessel *Te Kaihōpara* is part of a campaign to help the Hauraki Gulf. As an example, Revive Our Gulf, a collaboration between the University, the Nature Conservancy and the Mussel Reef Restoration Trust is working with Ngāti Manuhiri to re-establish mussel beds.

Associate Professor of Marine Science Nick Shears says the 15.9m catamaran will support many research activities including scientific diving. "It provides us with access to the offshore islands at a time when we are seeing unprecedented changes in the Hauraki Gulf. The offshore islands are really important to see what's happening."

Olympic gold medal-winning sailor Peter Burling, Live Ocean co-founder, says the boat is "going to allow so much great research. Live Ocean is stoked to see the University put so much emphasis on it".

Fellow gold-medal-winning sailor and Live Ocean co-founder Blair Tuke says there's so much that's still unknown in our marine environment. "We need to get data to learn about it and take it to the public to get people's attitudes to change."

Local iwi Ngāti Manuhiri gifted the name *Te Kaihōpara* and the boat was funded by the University and a philanthropist. The aluminium vessel was built in New Zealand and can carry 25 people.

Read more: **auckland.ac.nz/research-vessel**

Watch video: tinyurl.com/YouTube-UoA-vessel

*The University's marine research boat Te Kaihōpara can carry 25 people and is a huge boost for researchers working in the Hauraki Gulf.*

fishes to zooplankton as sea surface temperatures rose.

"One whole community just fell apart because the Bryde's shifted their diet."

Artificial intelligence has been developed to audit video footage collected by drones tracking the behaviour of different species in a community. This gives a nuanced understanding of 'who blinks first' when it comes to survival.

**"It's not a basket case ... There are a lot of positive things about the Gulf now. But we can't just let the place sit in this kind of bureaucratic limbo."**

– Professor Simon Thrush, director of the Institute of Marine Science

For Rochelle, it's about understanding the mauri or lifeforce of the Gulf. Work-ups that previously lasted around 30-40 minutes are now lasting little more than a few minutes, and there's been a massive loss of fish, including kahawai and tarakihi, as well as seabirds like the white-fronted tern.

"That loss of mauri, that loss of vitality and abundance of many of these species of big animals has happened without us really noticing."

The warmer waters of the Gulf have also attracted more oceanic manta rays from the tropics, and many are now being tracked with satellite tags to understand their migration and foraging patterns.

"With climate change, they're changing their movements, but that puts them at risk from interactions with fisheries and vessels that we've not really thought about," Rochelle says.

The Pulse of the Gulf project also revealed that every Bryde's whale was ingesting an average of 3.4 million microplastics every day – about the size of a softball – after feeding on zooplankton.

While microplastics (defined as plastic particles less than 5mm) can be colonised by microbes, which may have some nutritional value, the ingestion of microplastics by zooplankton and other organisms can have negative consequences. Microplastics can also absorb and concentrate toxic organic substances, and studies have shown that these can then be transferred up the food chain.

Rochelle worries about the long-term impact of zooplankton ingesting something that can be half their size.

"Will that compromise the zooplankton community; does it compromise their ability to thrive?"

New Zealand's status as the 'seabird capital of the world' is also under threat, with 90 percent of species now threatened with extinction. The most immediate concern is for seabirds like petrels and shearwaters, which are struggling to reach plankton in deeper waters.

"Around Auckland, the poor little chicks are just so much lighter and we think it's because of the parents taking longer to find food," says Dr Brendon Dunphy, senior lecturer in the

School of Biological Sciences, who is leading a project to investigate the decline of the tītī or sooty shearwater in the North Island.

Funded by a $1 million grant from the MBIE Endeavour Fund, the project has been co-designed with Māori muttonbirding communities who are eager to preserve the mana and mauri of the tītī. By tracking the birds' migration with GPS tags and sampling feathers to assess stress levels, Brendon hopes to develop predictive tools to improve their climate resilience.

"One of our goals is to provide as much information to kaitiaki (guardians) to assist them in making management decisions."

## BOOST FROM RESEARCH VESSEL

The launch of the University's new multi-million-dollar research vessel *Te Kaihōpara* (its name means 'the explorer') in January also signals a new era in the campaign to revive a troubled and fast-changing Hauraki Gulf.

"*Te Kaihōpara* will enhance our teaching and research and support the wider push to find solutions to our environmental challenges," says Simon.

"We now have more capacity to sample the seafloor and deploy increasingly sophisticated equipment and analytical instruments."

Among a long list of goals for the vessel is to better understand the potential for carbon storage in coastal ecosystems, including the role of destroyed kelp forests and the flourishing of sea urchins, which have thrived because natural predators such as snapper have been overfished.

Despite the fact that farmers can earn carbon credits for planting trees, Simon says the role of marine ecosystems in storing carbon – known as blue carbon – has been largely ignored even though New Zealand has more than 20 times its land area in the sea.

"What we're after with carbon in a climate-change world is the capacity to store it while we maintain the biodiversity of the ecosystem," he says. "The more carbon we can lock up, the better it will be in terms of our trajectories with climate change."

Emeritus Professor John Montgomery is a firm believer in the power of complex modelling systems, which can feed into climate models to gain a better sense of the relationship between oceans and the atmosphere.

"Those models that are able to predict future states are really critical to gaining support and optimising the interventions that we can and will do to improve things."

Fisheries are part of a broader process, and during his 12 years as director of the Leigh Marine Laboratory, John oversaw a study which showed that about 11 percent of the juvenile snapper found within a 40-kilometre radius of the Cape Rodney-Okakari Point reserve came from adults inside the small Goat Island Marine Reserve.

"That negates some of the criticism of marine reserves, that it's just putting fisheries pressure elsewhere. In fact, it's a win-win for fishing and for protection."

Much more controversial is the idea of charging for a recreational fishing licence which John says might encourage amateur fishermen to record their catch and "create a kind of culture within the recreational industry to be more environmentally focused than they tend to be".

Another remedial option, says John, is to re-establish lowland forests as sediment filters to create "a kind of freshwater swampy wetland" around estuaries and harbours, which would reduce the sediment load entering estuaries.

A much more difficult problem to solve is the issue of sediment pouring into the Gulf from the Hauraki Plains, which he describes as a legacy 'mountains to the sea' issue that traces back to changes in land use when Europeans arrived.

"There's a lot of good stuff going on with ▶

*Emeritus Professor John Montgomery says modelling systems that feed into climate models can give a better sense of the connection between oceans and the atmosphere.*
*Photo: Chris Loufte*

*Above left: Dr Jenny Hillman is collaborating with local iwi to restore long-lost mussel reefs. Above right: Dr Kevin Trenberth says warmer oceans can fuel storms that lead to devastating floods.* Photos: Chris Loufte

respect to riparian planting and trying to reduce sediment in the waterways," says John. "That's what needs to happen and eventually it will have an impact, but it's going to be a cross-generational time before that comes through."

## MUSSEL RESTORATION

Of more immediate concern is the restoration of mussel beds that were wiped out decades ago by overfishing and bottom trawling.

"These places are so far gone that we have to do something more active to help," says marine science lecturer Dr Jenny Hillman from the Faculty of Science. She is collaborating with Ngāti Whātua Ōrākei, Ngāti Manuhiri and Ngāi Tai ki Tāmaki to restore long-lost mussel reefs.

Since 2021, more than 200 tonnes of farmed mussels donated by the seafood industry have been dropped into the water at Auckland's Ōkahu Bay and near the Mahurangi Peninsula in what appears to be a promising effort to restore biodiversity.

"We found increased numbers of small snapper, for example, which are obviously important fish species in both places. So the beds are having a benefit," says Jenny.

Additional research is being undertaken to determine other benefits, including the ability of mussel beds to help sequester and store carbon. A more pressing mission is to investigate the impact of predators that feed on shellfish and interfere with the recruitment pathway of mussels which are necessary to establish long-term self-sustaining beds.

And while divers with cameras have previously been used to monitor sites, Jenny's team is looking to deploy remote 'bivalve gape sensors' in the form of tiny magnets that attach to either side of a mollusc to monitor whether they're feeding normally.

Artificial intelligence is also being used, in a collaboration between the Institute of Marine Science and the School of Computer Science, to build a 3D structure of how beds are developing.

"That will be really exciting because it'll make a big difference being able to see what the beds are doing and being able to map them and get this really important data out in a cost-effective way," says Jenny.

Meanwhile, a government proposal to establish 19 new protected zones in the Hauraki Gulf and develop a Fisheries Plan that restricts bottom trawling and Danish seine fishing methods to what were described as carefully selected access areas or 'trawl corridors' has been met with a mixed reaction by the marine scientists.

For John, it's "a step in the right direction," although he would like to see something more radical like a complete ban on bottom-contact commercial fishing. Rochelle also says New Zealand has to have "some quite big discussions" around what marine protection looks like.

"I don't know that what they're proposing is bold enough," she says.

Only 0.3 percent of the Gulf is currently in formal protection, and Simon says there's a lack of specifics about what's being proposed and "no rigorous action plan" between government agencies that also takes into account the need for land-use changes.

"It's not a basket case, it is possible to save it. There are a lot of positive things about the Gulf now. But we can't just let the place sit in this kind of bureaucratic limbo."

Simon hopes future decision-making reflects

# "There's a lot of good stuff going on with respect to riparian planting and trying to reduce sediment in the waterways."

– Emeritus Professor of Marine Science John Montgomery

the te ao Māori approach where living and spiritual realms are interrelated, and he'd like to see more decisive action such as the declaration of rahui (temporary bans) by many iwi and hapū to protect the likes of depleted scallop beds.

"We see that many iwi are playing a more prominent role in decision-making around our environment and they're driving change, often way faster than government agencies are driving change."

Meanwhile, climate scientists like Dr Kevin Trenberth are warning of more extreme weather events as oceans warm. The honorary academic in the Department of Physics says warmer oceans have provided a lot of extra fuel for the storms that led to devastating floods in Pakistan, California and Australia in the past two years.

"While the recent flood disasters are not directly caused by climate change, the warming climate contributes substantially to making all extremes more so, and the damage increases exponentially; a 10 percent increase in rain might lead to 100 percent increase in damage."

What is certain is that there's more awareness than ever before about our warming oceans, the threat of climate change and the need for action. Simon says conversations about having a better relationship with our natural environment, which would have been hard to start before Cyclone Gabrielle, are a lot easier to start now.

"The trick is that we make change fast enough for it to actually count."

**ALUMNI EVENT GUEST SPEAKER**

In June, Professor Rochelle Constantine will present a talk in Hong Kong, 'Ocean Life – Connecting Us Globally and Locally'. See **auckland.ac.nz/hk** for more information.

## STORMY WATERS

As the debate about inadequate stormwater infrastructure rages in the wake of the Auckland floods and Cyclone Gabrielle, Associate Professor Asaad Shamseldin from the Department of Civil and Environmental Engineering says that no infrastructure is ever going to be100 percent bullet-proof, so people must decide what they are willing to tolerate.

Asaad says one of the lesser-known issues is the heavy metals from roofs and even car brake pads that accumulate in some Auckland waterways and could reach a threshold in the urban harbours of the Gulf where "the marine environment will not be able to tolerate it".

In Auckland, he says there needs to be a more holistic view about urban intensification, which is reducing green spaces and increasing runoff. But improving stormwater infrastructure and increasing flood protection comes at a cost.

"I haven't seen anything to suggest that we've had a serious conversation or consultation with the community with regard to what is an acceptable risk."

One solution is the development of 'sponge cities', which Dr Timothy Welch from the School of Architecture and Planning says would let floodwaters filter through urban areas more quickly. He says modernising all the stormwater infrastructure will take decades and billions of dollars, whereas the sponge-city concept doesn't have to be extravagant or expensive.

"The solutions can be as simple as planting more trees and greenery, using less pavement for driveways or more porous cement for car parks."

*Associate Professor Asaad Shamseldin from the Department of Civil and Environmental Engineering says, "No infrastructure is going to be 100 percent bullet-proof."*
*Photo: Billy Wong*

REFLECTIONS ON EMERITUS PROFESSOR

# STUART McCUTCHEON

10 November 1954 – 6 January 2023

**Emeritus Professor Stuart McCutcheon** was vice-chancellor of the University of Auckland from 2005-2020. He passed away suddenly from a heart attack in January, just a few years into his retirement. Three friends and colleagues reflect on his contributions.

**Obituary**

## NATURAL MANA

Stuart was a mentor, colleague, golfing buddy and friend. He was blessed with natural mana and extraordinary leadership qualities. He was selfless, humble, smart, witty, personable, fair and genuinely caring. He could light up a room with his stature and easy nature, and could converse with anyone about anything, from student to donor to university staff he didn't know.

My first interaction with Stuart was just before he became vice-chancellor. We shared a table at a meeting, and my notes from that day read "new VC is warm, affable, funny". After 15 years at the helm of New Zealand's largest university, Stuart was still warm, affable and funny.

He also had an unflinching commitment to ensure the University remained internationally respected – recognised for its people, teaching, research and innovation. Everything he did during his term reflected that commitment. Nothing made him prouder than when our reputation was confirmed by international accolades, or an alumnus was recognised for something remarkable. He would say with his warm smile, "Isn't that why we're here!"

He was admired by the wider University community, even those with whom he sometimes clashed. Many political masters did not share his passion for quality, inclusive higher education or were unwilling to acknowledge the essential contribution a university makes to society, which to Stuart was a constant frustration.

I have a favourite quote from Harry Truman: "It's amazing what you can accomplish when you don't care who gets the credit", which aptly describes Stuart's approach. Stuart built effective teams and rarely sought credit himself but was quick to pass on credit and praise to others.

Shortly after his arrival as VC in 2005, he asked for a tour of the Grafton Campus. We spent an afternoon stalking the old rooms and narrow corridors, after which he quipped, "This adds new meaning to the term deferred maintenance."

Soon after, a business case was submitted for Grafton. He deflected any credit for this massive initiative to others. Major rebuilds of the Science and Engineering campuses followed, along with student facilities. Many of the facilities we now enjoy stem from Stuart's focus on creating a world-class experience for students and staff.

As a boss, Stuart was clear about his expectations. He demanded loyalty, but returned that loyalty with trust and support. Rather unnervingly, Stuart seemed to be across everything that was happening, and had an acutely accurate memory for people and events. What he disliked most was surprises and he expected to be informed of anything with the potential to blow up, no matter how trivial it might seem. This meant phone calls, text messages and emails, sometimes at night – which were always received promptly and with thanks. Once informed, he had your back.

My wife Tam and I were privileged to share a friendship with Stuart and his wife Deborah and, the weekend before he died, we had a lovely lunch with them. Stuart and I had played a round of golf in which he was his usual self, talking enthusiastically about his new fitness regime, the new golf clubs he had purchased, and exciting plans for the coming year. But they weren't to be.

The world is a less interesting place without Stuart, but he leaves an indelible legacy. He modernised our University, led two philanthropic campaigns that were the largest in the country, and built a community of committed donors and friends through his personality and ability to convey a vision. On behalf of the entire Waipapa Taumata Rau, University of Auckland community – staff, students, alumni and friends he came into contact with through his role – Vale Stuart.

**Professor John Fraser**
**Dean, Faculty of Medical and Health Sciences**

## IMPORTANT LEADER

***He hono tāngata e kore e motu; kā pā he taura waka e motu.*** *Unlike a canoe rope, a human connection cannot be broken*

The last time I saw Stuart was at my farewell in 2022 at Old Government House. He was enjoying his retirement life, busy doing what he valued and glad to be rid of the regular grind. Not doing much fishing, though – despite promising to do so when he left. He was living a full life.

I worked with Stuart at three universities over nearly 30 years: Massey, Victoria and the University of Auckland. We joked that I followed him around, and while this was coincidental, it certainly appeared my career trajectory was somewhat aligned with where he had located.

My earliest memory of him was in his role as DVC Research at Massey University. He encouraged me to pursue my research interests and was keenly supportive of my various research applications, scholarships and projects. We didn't work regularly together, but it made a big difference to an early-career Māori academic to have his clear support.

Our next contact was when I became a professor at Victoria University of Wellington where he was vice-chancellor. We didn't have a close working relationship, but again I always felt free to have frank discussions and debates with him about anything to do with the university and tertiary education sector. His fierce intellect was always evident, meaning you had better make sure you knew what you were talking about!

Our last contact was the longest and most significant because I was able to work alongside him while I was a professor in education, director of Starpath, director of the Atlantic Fellowship Programme for Social Equity and as pro vice-chancellor Māori at Waipapa Taumata Rau.

Stuart was consistent. I knew what to expect. He was fearlessly clear about what he needed to know and the decisions he was deliberating. I admired this quality. He would take a punt on someone and back them, just as he had with me. His openness was a quality that stemmed in some part from his being from Manawatu. He would say, "You could take the boy out of Manawatu, but not Manawatu out of the boy." Pragmatism, honesty and clarity were parts of this character.

I saw his love for his wife Deborah and his pride in their sons and wider family, and his closeness to those whom he'd championed. He was an important leader for the tertiary education sector in a period of rising quality and internationalism and a proud New Zealander. We should, as a country, acknowledge the passing of someone who had been a rock for this sector for many decades. Moe mai rā e hoa.

**Rt Hon Dame Cindy Kiro**
**Governor-General of New Zealand**

## VISION AND HUMANITY

My last meeting with Stuart involved torrential rain in New York with not a cab in sight. The subway, a few blocks from our destination, was impossible to exit without getting soaked. A fellow Auckland alum miraculously appeared and handed me an umbrella, procured from a nearby street vendor. I felt thankful for the Kiwi kindness and we headed to our event, where I was about to do something expressly against Stuart's wishes.

This was his final evening with us as vice-chancellor. As the Chair of the US Friends, I was under strict instructions that he did not want a fuss, to my mind the tallest of tall orders. How could one not summon cheers for a man whose extraordinary vision, leadership, character, and personality we all deeply appreciated, and whose presence was the highlight of many such gatherings. I am happy to report that although a little embarrassed, Stuart took it all in his stride. After an initial raised eyebrow, his graciousness trumped humility and not standing on ceremony, other superlative Stuart qualities.

After that last face-to-face encounter, we frequently emailed or communicated on WhatsApp. He was always able to summon a perfectly calibrated remark, whether of levity or gravitas, as the situation demanded. He could make you laugh with a hilarious comment and was the perfect interlocutor to share an irreverent meme. In a world where these qualities at times appear less prized or in short supply, what I applaud Stuart for, in every interaction, was his persistent candour and common sense.

For me, his straightforwardness of soul posed the question: was this something Kiwi, or particular to him? Was it the water in Palmerston North that made him so easy to be around, possessed of such a smooth and effortless personality? Or was he so cool from his arcane knowledge of thermoregulation in lambs?

Stuart was both a quintessential Kiwi and exemplary cosmopolitan. In New York, you would call him a mensch, a Yiddish term for someone of integrity and dignity, with a sense of what is right and responsible – an appellation well-deserved. You could also term him a not-so-brash New Yorker since when he came to town, he did Manhattan like a native.

Stuart also had an enduringly boyish quality, an eternal youth almost, which makes his passing such a shock and anomaly in time.

I'll remember him beyond his accomplishments and contributions, as someone enduringly life-affirming, a man with striking humanity. I am grateful for his companionship and for the way he touched us so profoundly – for his humour and sound judgement, his dignity, his joy.

**Peter Rajsingh**
**Chair of US Friends of the University of Auckland**

**"Stuart demanded loyalty, but returned that loyalty with trust and support."**

– Professor John Fraser

*Stuart and wife Deborah with his tribute book presented at his farewell from the University in 2020.*

# SOCIAL DISCONNECTION

*Alex Casey is senior writer at* The Spinoff *and co-host of podcast* The Real Pod. *She has a BA (2013) in Media, Film and Television, and Sociology. In 2018, she became a University of Auckland 40 Under 40 awardee.*

**"How would I watch the gender reveal for an unborn baby currently growing inside one of my distant acquaintances from primary school?"**

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

When I was at university in 2010, I recall rolling my eyes at a hand-wringing article all about how the internet was going to pulverise our attention, wreck our curiosity and destroy our ability to ask questions. I can no longer remember the name of the paper, the person who wrote it, or anything specific about it, because the internet – specifically social media – has since pulverised my attention, wrecked my curiosity and destroyed my ability to ask questions.

Back then, Facebook was strictly a place to upload 47 terrible, blurry pictures of you and your friends on a night out and spend hours meticulously tagging everyone for no reason. Instagram barely existed and, if it did, you wouldn't even be able to tell what you were looking at under the grainy sepia filter.

We didn't know back then, in what still chillingly feels like extremely recent history, how these platforms would transmogrify into the oozing horror portals we know today.

Barely a day goes by now where there isn't some horrible news emerging about the social media platforms that rule our lives. In my work as a journalist for *The Spinoff*, I have spoken to 16-year-old girls who are saving for breast implants as a direct result of following the Kardashians on Instagram, and I have started a TikTok account as a 13-year-old boy and seen just how long it took for the algorithm to serve me up extremist, sexist ideas (less than 60 seconds).

It is perhaps not a surprise, then, that more and more people are choosing to abandon these platforms altogether.

"I think that it is distorting human nature," Eleanor Catton told *The Guardian*, five years after deleting her Twitter account. "It's altering the way we think. It's altering the way we exist in time."

Ella Yelich O'Connor, aka Lorde, justified her online exodus bluntly: "I did it because I felt like my brain wasn't working very well anymore."

Two years ago, I quietly made my exit, too. Twitter was the first to go, a constant stream of anger and horror that had its claws in me so deeply that I found myself waking up every hour to check it through the night. Then went Instagram, a similarly relentless stream of inadequacy and anxiety. It was when I started giving up hours of my own weekend to lie on the couch and watch other people's weekends through Instagram stories that I realised the rot had truly set in.

While reading Jia Tolentino's *Trick Mirror*, I had another revelation about why it was all so exhausting. Referencing Erving Goffman's theory of social engagement (something I do actually remember from 2010 – shout-out SOC101), she says social media has flattened the many facets of our lives into a never-ending show. "Online, your audience can hypothetically keep expanding forever, and the performance never has to end," she writes.

In real life, we can shift between our different roles with ease, and crucially allow ourselves "backstage" time to be a grizzly grub where we don't have to perform anything to anyone. But online, she argues, your audience is limitless and the show must go on. On social media, you are performing every 'you' to everyone, everywhere all at once: you as a colleague, you as a friend, you as a family member, you as a partner. No wonder we are all so tired.

For a long time, leaving social media felt like a type of death. How would people know what I was doing? How would I know what everyone else was doing? How would people be able to see my work? How would I watch the gender reveal for an unborn baby currently growing inside one of my distant acquaintances from primary school? It felt like pure hell, but being completely paralysed by information and images, outrage and aspiration, felt much, much worse.

I do still occasionally activate Facebook to ask something on the local community page. And despite it being one of the biggest, baddest social media platforms available, these interactions ironically feel much more productive than anything else out there. No misinformation, no influencers, no performance. Just a neighbour, desperately untagging 47 blurry photos of herself on a night out in 2010, and trying to get rid of some cardboard moving boxes.

Watch Alex in *Connect & Develop* talking about Overcoming Imposter Syndrome: **auckland.ac.nz/connect-and-develop-alex-casey**

**Research profile**

## Megan Fowlie profiles Dr Peng Du, whose research into gastrointestinal electrophysiology allows high-tech investigation of gastric diseases.

Fun fact: Biomedical engineer Associate Professor Peng Du, a key player in emergent medical technology in New Zealand, once curated an art exhibition.

Entranced by the aesthetics of science, he put together *Art of Bioengineering* at the Gus Fisher Gallery in 2015. Its unexpected and dramatic visions are still on show in the foyer of the Auckland Bioengineering Institute (ABI).

"Art is another form of communication. Things that you can't put into words, you can put into pictures. You can see something created unintentionally and inspect your work through another mindset."

Peng is the ABI's Associate Director of Research and a lecturer in Engineering Science. In 15 years at the University, he has an impressive list of accolades, including the Prime Minister's MacDiarmid Emerging Scientist Prize in 2019 and the 2022 University of Auckland Research Impact Award. His world-leading research culminated in the development of a wearable device, Gastric Alimetry, that records gut bioelectrical activity non-invasively. It's now used in more than 15 hospitals in five countries. Peng's research has also uncovered new biomarkers for previously undiagnosable digestive diseases. Alimetry Ltd, the company spun out from the research, grabbed a record three awards at the 2022 NZ Hi-Tech Awards.

Peng spent his early years in the city of Ürümqi in Xinjiang province, a city with a majority Muslim population. "That bicultural environment as a Han Chinese is an interesting dynamic, similar to Pākehā and Māori. There's the coloniser and the Indigenous people; integration and sometimes a clash of cultures."

His family moved here in the late 90s and he headed to Kelston Intermediate. The relaxed freedoms stood out for 11-year-old Peng: calling teachers by their first names, open fields and barefoot kids. And there was the new mix of ethnicities and another language.

At Avondale College, Peng worked his way up to the top stream from the bottom. In his final year, he see-sawed between university-level mathematics and catch-up subjects needed for Bursary. "I ended up taking Classics and English," he says gleefully.

He still has a keen interest in ancient architecture. "In Rome, I enjoyed seeing the buildings I learnt about in school – the Pantheon, Hadrian's baths, the aqueduct, the Colosseum."

*Associate Professor Peng Du's world-leading research includes technology to investigate gut disease non-invasively.* *Photo: Billy Wong*

By the end of high school, Peng had fallen in love with chemistry. He even got to hold the Nobel Prize for Chemistry in his hands after an inspiring public lecture from Professor Alan MacDiarmid. At university, he incorporated chemistry, biology and engineering into the fairly new degree of Biomedical Engineering.

His introduction to the gut came in his second year, and when he met Professor Andrew Pullan his PhD topic was sealed.

"Andrew was charismatic. He could paint a picture, 'Here's the gut – it's this green pasture, the new and final frontier!'" Peng couldn't resist.

Peng also met Professor Greg O'Grady who taught him about clinical translation and putting a device into patients' hands. That combination ultimately led to Alimetry Ltd, but despite its success, Peng is still in academia.

But the value of Peng's research means he has gained funding from the Royal Society Te Apārangi, the Health Research Council, Te Tītoki Mataora, the US National Institutes of Health, and a number of others.

Peng, a father of two, describes academia as a sheltered environment to investigate questions of interest.

"It's more of a lifelong mission than a short-term goal – job security is a concern."

"With University spin-outs, there is no middle ground where you can have one foot on each side, but ABI is making a case where you can go back and forth."

**"With University spin-outs, there is no middle ground where you can have one foot on each side."**

– Dr Peng Du, Associate Director of Research, ABI

Research

# KAWAKAWA'S HEALING TESTED

## More than 60 biologically active compounds found in plant's leaves

Researchers from the University of Auckland are quantifying the health effects of kawakawa, a plant long-used in Māori medicine or rongoā.

The researchers worked with hapū-owned Wakatū Incorporation and applied liquid chromatography and mass spectrometry to identify the active compounds in the endemic plant's leaves.

"Our findings show that kawakawa contains an abundance of pharmacologically active metabolites," says Liggins Institute research fellow Dr Chris Pook.

Kawakawa (*Piper excelsum*) is a relative of black pepper (*Piper nigrum*). The family of plants to which they belong, the *Piperaceae*, is known for its roles in traditional medicinal and culinary practices in cultures around the world.

Kawakawa is used in many ways including as a topical balm to soothe eczema, boils, bites, stings and grazes, as well as to relieve toothache, gastrointestinal and urinary problems.

"The most abundant compound, of more than 60 we found, was pellitorine, which has numbing effects and could explain its use for pain relief in rongoā Māori," Chris says.

Pellitorine also has a key role in chemical pathways in the body that reduce inflammation.

Another compound found, yangambin, was shown in earlier trials to have anti-inflammatory effects on the cardiovascular system.

The research was published in *Nutrients* journal.

**Full story: auckland.ac.nz/kawakawa-trials**

*Dr Chris Pook from the Liggins Institute says kawakawa has diverse compounds present.*

# GENE EDITING RELIEVES PAINFUL SYMPTOMS

## Patients with a challenging genetic condition have their lives changed

Patients with a debilitating inherited illness say gene-editing therapy has changed their lives and completely relieved their pain.

The Kiwi group who participated in a clinical trial have hereditary angioedema, meaning they experience unpredictable, sometimes frequent and potentially lethal attacks of swelling.

They were treated in late 2021 and early 2022 in the New Zealand Clinical Research facility in Auckland, as part of a first in-human clinical trial of the CRISPR-Cas9 gene-editing therapy.

"It looks as if the single-dose treatment will provide a permanent cure for my hereditary angioedema patients' very disabling symptoms," says principal investigator and honorary senior lecturer Dr Hilary Longhurst. "Plus, of course, there is huge potential for development of similar treatments for other genetic disorders."

The patients who participated in the trial are reporting that the therapy has been "life-changing", says Hilary.

The therapy is delivered via a lipid nanoparticle, or miniscule ball of fat, containing the CRISPR-Cas9 genetic material, and is infused through a vein in the patient's arm over two to four hours. "This ball of lipid targets the treatment into the liver, and then the CRISPR guides the Cas9 onto exactly the gene that is causing the problem," Hilary says.

The next stage will be a randomised, double-blinded, placebo-controlled trial.

**Full story: auckland.ac.nz/crispr-cas9-trial**

*Dr Hilary Longhurst is excited about the potential for CRISPR-Cas9 treatments for other genetic disorders.*

# METH IN AIR IN AUCKLAND CITY

## Meth, nicotine, caffeine and THC detected in Customs Street air

Methamphetamine, nicotine, caffeine and tetrahydrocannabinol were detected in downtown Auckland air in the first study of its type in New Zealand and Australia. Traces caught by filters at a pollution monitoring site on Customs Street near the bottom of Queen Street were analysed by researchers Dr Joel Rindelaub from the School of Chemical Sciences and Master of Science student Olivia Johnson, who is now working at the Institute of Environmental Science and Research.

The largest concentration of meth detected was 104 picograms (one-trillionth of a gram) per cubic metre of air, higher than in cities such as Barcelona, and spiking ahead of Christmas and New Year.

Joel says the results "highlight that we really don't know as much as we should about what's in the air that we breathe". The study, with co-authors doctoral candidate Hamish Patel and Associate Professor Gordon Miskelly, was published in the journal *Atmospheric Pollution Research*.

**Full story: auckland.ac.nz/meth-air-pollution**

*Dr Joel Rindelaub is a research fellow in Chemical Sciences whose specialist field is air pollutants.*

# VOYAGE INTO MĀORI PAST

## An expedition to the sub-Antarctic hoped to yield clues

A challenge to the idea that pre-colonial Māori adapted to living in Aotearoa by planting gardens like kumara in the north and hunting wild resources like seals in the south is the focus of a significant expedition to the Auckland Islands in the Southern Ocean.

The Marsden-funded expedition to the sub-Antarctic island of Enderby was undertaken in April, led by Simon Holdaway and Thegn Ladefoged, professors of archaeology at the University, and Dr Matiu Prebble, an environmental scientist at the University of Canterbury, supported by Ngāi Tahu.

Simon says the project tests long-held theories that have rather simplistically divided early human society into either agriculturalists (Neolithic) or hunter-gatherers (Palaeolithic) depending on which climates they lived in.

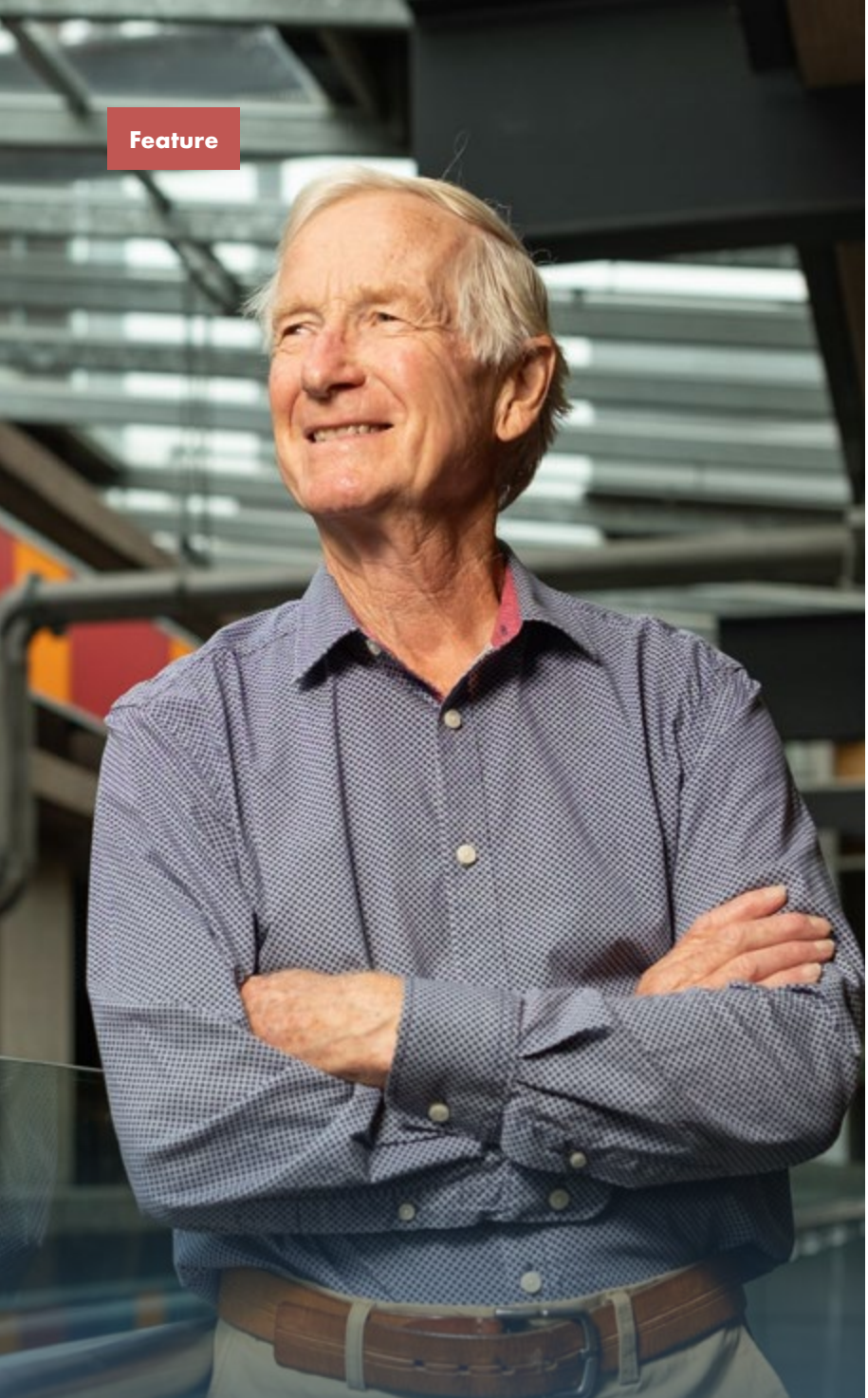
Simon was one of 12 scientists and students, and seven crew, to spend ten days on Enderby, a Department of Conservation-protected island, 465km from Bluff, in the uninhabited Auckland Islands archipelago. The team looked for plant and animal remains, together with the portable artefacts and features like fire places, that might tell a different and more complex story of Māori habitation, including analysis of pollen samples.

"Changes in vegetation and any use of burning will provide clues to any human-made changes in the plant life of the island," Simon said before the trip.

"We also know that people were down there around 700 years ago, so it will be interesting to work out to what degree people were supplying the island with these artefacts."

**Full story: auckland.ac.nz/enderby-voyage**

*Professor Simon Holdaway at home before departing on an ambitious expedition.* *Photo: Chris Loufte*



Feature

# CRYSTAL-CLEAR LOVE OF SCIENCE


Twenty years ago, Professor Ted Baker was on the cover of the first *Ingenio* magazine. Inside, he talked about the work of his new Centre of Research Excellence, identifying the shape of tuberculosis proteins. Donna Chisholm finds out more about his career then and since.

Distinguished Emeritus Professor Ted Baker's stellar scientific career is notable not only for his skills, but also a serendipitous sense of timing.

He began his PhD at the University of Auckland in the early 1960s. This was just after it installed its first computer, a behemoth of an IBM that took up much of a large room on the third floor of the Old Choral Hall and took the grunt work out of thousands of calculations his studies in X-ray crystallography would require.

Ted arrived at Oxford University for his post-doctoral fellowship in 1967, just as protein crystallography was taking off, and perfectly timed to be invited by Nobel Laureate Dorothy Hodgkin to join the team that was closing in on the structure of insulin.

By 1976, and with the help of equipment clandestinely purchased by his Massey University head of department, he had determined the structure of the kiwifruit enzyme actinidin, the first protein structure to be solved outside Europe and the United States.

In 1997, after 20 years at Massey, he moved to the University of Auckland as a professor of structural biology, arriving at the dawn of the genome-sequencing revolution and just before the launch of the Centres of Research Excellence.

Now, at 80 – five years into his retirement and 20 years after featuring on the cover of *Ingenio*'s first edition – Ted looks back with great pride at the evolution in the science that made his name – including startling developments in artificial intelligence and electron microscopy that his work has helped to bring about.

First, a brief primer on crystallography. Protein crystallisation is a painstaking and unpredictable process but the crystals are essential to obtain X-ray scattering patterns. From many thousands of scattered waves, laboriously measured, the structure of the molecules in the crystal can be imaged and interpreted. Hey presto! A three-dimensional atomic model, which for a protein will comprise thousands of atoms.

"I was good at maths, and enjoyed physics and chemistry. This was a combination of them all. It suited me."

The family-oriented, collaborative environment at Oxford that Dorothy Hodgkin fostered had also suited him. As the insulin work there reached its climax, the lab was relocated into an old Victorian house where the small team of scientists included another New Zealander and alumnus, the late Professor Guy Dodson, and wife Eleanor. Ted's wife Heather, an Auckland alumna and, like him, a chemistry graduate, was invited by Dorothy to join the team.

"Our newborn daughter, and two other young children, shared the room where we were doing the image interpretation and model building, so it was like a nursery. It was Dorothy's holistic view of how science should be done."

Ted returned home, enthused with the idea of bringing protein crystallography to New Zealand. "I was greatly encouraged by Dorothy. When I told her of my wish, and also how few resources I would have, she said, 'Oh, you shouldn't worry about that, Ted, just get started and it will all fall into place in time.'"

And so it did. After proving the potential of his research in his time at Massey, on actinidin and other proteins, Ted received lucrative offers from overseas, but chose to move to the University of Auckland where he already had strong relationships. He became the first director of the Maurice Wilkins Centre for Molecular Biodiscovery, working with names such as Professor John Fraser, an expert on microbial biology and molecular immunology; Distinguished Professor Sir Bill Denny, renowned medicinal chemist and cancer drug researcher; Garth Cooper, a professor of biological sciences and expert in diabetes, drug discovery, and protein and peptide chemistry; and Distinguished Professor Peter Hunter, whose 3D mathematical models of cells and organs increased understanding of physiology.

Ted's work increasingly focused on bacteria, specifically *streptococcus* and the tuberculosis bacterium. "The first genomes sequenced were bacterial, so *Mycobacterium tuberculosis* was an obvious target because it was such a serious health problem around the world."

His research, supported by the Health Research Council, saw his lab invited to join a US National Institutes of Health-sponsored international consortium including labs from the UK, Germany, India and Korea. The research has vastly increased scientists' understanding of the TB bacterium, and other bacteria. It led indirectly to the development of new therapies for tuberculosis, including three from Bill Denny's lab that have reached clinical trials.

Since Ted's 2003 *Ingenio* cover appearance, there have been many achievements and accolades. The protein structures he and his group determined enabled them to define mechanisms by which bacteria cause disease. These included, in 2015, a previously unknown protein Rv1738 that enables the TB organism to hibernate in the lungs and evade the immune system. In 2016, there was another protein, MenD, found to be essential for making vitamin K and an important target for anti-TB drug design.

In 2006, Ted was awarded the Rutherford Medal and in 2007 became a Companion of the NZ Order of Merit for services to science.

He says during his latter years at the University, he took greatest pride in helping promising young scientists in his lab to develop their own ideas and careers. These included former Korean PhD student Hae Joo Kang, whose work on a mystery protein from *streptococcus* helped identify it as a key vaccine target, and Jodie Johnston, now at the University of Canterbury, researching microbial pathogens and antibiotic resistance.

Another star student was Iranian-born Dr Ghader Bashiri, now a senior lecturer in the School of Biological Sciences. Ghader's work focuses not just on tuberculosis, but also the development of possible compounds to reduce methane emissions.

Ted is happy to see these new directions emerging for the future, not only of science, but the planet.

**"I think we'll see an equilibrium between experimental science and predictive science that will benefit both. Science moves on, building on work that has gone on before."**

– Distinguished Emeritus Professor Ted Baker, Faculty of Science

And as for crystallography itself? The huge amount of information about protein structure, almost all from crystallography, is freely accessible from the Worldwide Protein Data Bank. There, it enables structure-based drug design and other applications – most recently artificial intelligence – to enter the field. With massive computing power now available, scientists have applied AI to the task of predicting the structure of any protein from its amino acid sequence, informed by the database of known structures.

It is too early to say what the full impact will be, Ted says.

"I think we'll see an equilibrium between experimental science and predictive science that will benefit both. Science always moves on, building on work that has gone on before."

He's proud that his research in crystallography has helped make that momentum possible. And would he choose a different branch of science as a doctoral student today?

"I'd always choose experimental science. When you see something for the first time – a new protein structure, for example – and dig deeply into it, there is such a feeling of excitement. I have loved every minute of my time in research."

**MAURICE WILKINS CENTRE**

The Maurice Wilkins Centre for Molecular Biodiscovery is a Centre of Research Excellence, one of ten funded by the government until 2028. Its director is Professor Greg Cook from the University of Otago and its deputy directors, from the University of Auckland, are Professor Dame Margaret Brimble and Professor Peter Shepherd. The centre was named after New Zealand-born physicist Maurice Wilkins, who won the 1962 Nobel Prize for Medicine with Francis Crick and James Watson.

# 7 TIPS TO SPOT FAKE NEWS


'Fake news' is a troublesome phrase. It covers everything from deliberate disinformation to misleading information caused by sloppy journalism. It's a convenient shorthand, but hides a diversity of forms, causes and consequences.

It's also uncomfortable using a phrase that Donald Trump and other populists mobilised to corrode public trust in journalism and experts. Rather than encouraging healthy scepticism and critical thinking, 'fake news' post-2016 became the standard kneejerk comeback against unfavourable coverage: a weapon against critical thinking.

The phrase obscures the need for critical thinking and media literacy skills beyond true/false binaries. But news is rarely either genuine or fake. Literacy skills must plumb the murkier waters of spin and framing: an article devoid of falsehoods can still be deceptive in its selection and presentation of facts.

Fabricated 'facts' and misleading information blight our news ecosystem, one that includes the sources of fake news but also the billions of us online who can unwittingly spread and amplify it. Even AI chatbots have been in the spotlight for 'hallucinating' facts.

Luke Goode presents seven common-sense principles to boost your BS filters.

*Luke Goode says fake news is as old as the news itself.* Photo: Babiche Martens

**1 Humility**

We're all vulnerable to a basic cognitive bias: and recognising we can all benefit from more thoughtful news consumption habits is an important first step. Accessing reputable sources beyond our own ideological bubble also reduces the chances of swallowing narratives just because they fit our worldview.

**2 Context**

Before we worry about being deliberately misled, we can avoid getting the wrong end of the stick by pausing to ask ourselves whether the information in front of us is packaged as news, opinion, advertorial or satire. Reputable news outlets label accordingly. While we can also develop skills to detect whether an article is little more than a paraphrased press release from a vested interest, the burden of sorting news from opinion or diligent journalism from rehashed press releases shouldn't fall solely on individuals. Yet wherever these lines appear blurry, we can at least take this as our cue to handle information with care.

**3 Reading below the fold**

While broadsheet newspapers no longer reign supreme, this quaint phrase resonates even more strongly now. Digital business models incentivise clickbait headlines and sensational lead paragraphs. As audiences, we're primed to skim and scan at speed. But more careful reading practices are another obvious way to avoid getting the wrong end of the stick.

**4 Reputable sources**

Established media brands have more to lose by publishing false information and are more likely to resource the necessary checks and balances. This doesn't mean independent and alternative media should be mistrusted out of hand. They can be an important complement to the perspectives provided by mainstream media. For sources quoted within stories, red flags include unnamed sources (a staple of political journalism); experts proclaiming outside their own discipline, and "experts" you've never heard of and whose credentials you can't establish with a quick online search. Judging source credibility shouldn't fall entirely to audiences, but wherever it isn't readily visible, we should exercise caution.

**5 Triangulation**

We should use the technology at our fingertips to seek verification from other (trusted) sources whenever we're confronted with startling, scandalous or sensational information. But there's a caveat, which leads us to #6…

**6 Technological bias**

Finding information repeated on the first page of a Google search or in our social media feeds doesn't amount to verification. In the early days of Google's search-engine dominance, experts highlighting its biases were largely voices in the wilderness. Today, there's wider public awareness of the non-neutrality of search tools, social media algorithms and new tools like ChatGPT. Yet we're still liable to imagine an algorithm must be more neutral than a human editor could be. The point is not to disbelieve everything in front of our eyes (a horrible way to live), but we can become more discerning users of these tools when we keep in mind how they can make factual errors and reproduce human prejudices.

**7 A sense of perspective**

Fake news is as old as news itself, even if the phrase only came to prominence through Trump in 2016. While it will likely mutate into new forms we can scarcely imagine, it won't disappear. The problem won't be magically solved by technologies developed to filter it out or through increased media literacy – though both may play a role.

Moreover, democracy's problems run much deeper than fake news. Even if we could somehow solve fake news, democracy would still face major challenges on multiple fronts.

This tip is less about how to spot fake news and more about the risk of it dominating our field of vision and diverting our attention from other important challenges.

So, maybe I cheated. Maybe the headline is fake news. I only hope you read below the fold.

**Associate Professor Luke Goode is the programme director for Communication in the Faculty of Arts.**

Staff profile

# IN TUNE WITH THE MIND

Sam Mehr runs the Music Lab.
Photo: Billy Wong

**Janet McAllister meets Dr Samuel Mehr, a psychologist who uses the fun and games of a citizen science research platform to probe the influence of music.**

**"Why are humans so interested in music? Why do we do it all over the world?"**

Dr Samuel (Sam) Mehr's student job was a doozy. As an Eastman-trained freelance saxophonist, the Massachusetts local was at one point playing *How the Grinch Stole Christmas* a dozen shows a week while studying for his psychology doctorate at Harvard.

"In the basement of the theatre I would be reading papers on stuff like the origins of concepts," laughs Sam, a recent arrival in the University's School of Psychology as a senior lecturer whose Harvard doctorate was in human development and psychology.

But the combination of gigging and scholarly literature was not entirely random. Sam describes his overarching research questions as, "Why are humans so interested in music? Why do we do it all over the world?"

To this end, Sam has led projects looking at whether music appears in every society observed (it does); whether online listeners can correctly recognise lullabies and dance songs from diverse cultures (they mostly can); how and why music evolved; and whether there's good evidence that short-term music education can help cognitive function in young children (there's not).

This last revelation may be a shock and a relief to all parents who forgot to source *Baby Mozart* compilations, and Sam is bluntly reassuring: "There's this very pervasive myth about music lessons having all sorts of magical effects like better grades in other subjects, but the evidence is garbage."

Instead, music lessons are a wonderful thing to pursue on their own terms – because music is wonderful.

Sam and his partner – also a developmental psychologist – are parents to children aged five and two, and have discussed how their research field "makes you a more sceptical parent". While parents are bombarded with information about what's best for their kids, the evidence can often be murky and you don't have to take straightforward claims at face value.

At the same time, having children can inform research design when you're studying baby response.

"Enormous amounts of work go into seemingly mundane aspects of the experiment, like what colour are the walls? Does the room feel comfortable or scary? Just spending a lot of time around small children can give you helpful intuitions about how to do science with kids," says Sam.

As a young music educator during his undergraduate years, he found working with parents and preschoolers fun and interesting – Saturday sessions with babies were "always kind of a riot".

"Parents are very musical people whether or not they're aware of it. When you have children, songs become part of a routine, part of daily life – that was interesting to me, I didn't know that."

The family first came to New Zealand five years ago when partner Alia accepted a job at Victoria University in Wellington, and then moved to Auckland in the 2022-23 summer after Sam won both a Marsden Grant and a Rutherford Discovery Fellowship. He also holds a part-time position as an adjunct professor at the Yale Child Study Centre, which hosts themusiclab.org, his citizen science/participant crowdsourcing hub that has already attracted 5 million participants. It was established in 2017 at Harvard, but is now jointly based at Yale and the University of Auckland. Sam's lab is about 70 percent web-based citizen science research and 30 percent research on music with infants and children, being conducted through the Early Learning Lab in the School of Psychology.

Including me. I spent an amusing and surprisingly challenging hour one morning noodling around at themusiclab.org, listening to bells and whistles to find out my "musical IQ" (humbling), whether I'm a "super listener" (only just) and whether I'm tone deaf (aced it!). One of the quizzes was to find out what songs "the whole world knows". I kept thinking of songs all day, after I closed the website. 'Baby Shark'. 'Macarena'. Hmmm. Sam and his team may need to put up a new quiz to find out what songs we actually *like*.

**Read some of Samuel's research: auckland.ac.nz/sam-mehr-baby-talk**

**TEST YOURSELF ONLINE**
themusiclab.org

Feature

# CLIMATE-PROOFING *OUR CROPS*

Can our crops keep up with climate change? Professor Andrew Allan tells Gilbert Wong this question should be high on New Zealand's list of priorities.

*Professor Andrew Allan says plants are a big part of the solution to many of the challenges society faces.* *Photo: NZ Institute for Plant & Food Research*

In the fruit and produce region around Kerikeri, there are already no winter nights colder than 4°C. But chilly nights are crucial for many crops to 'set' the spring-flowering trigger.

"Our high-value crop industries will be hammered by the climate crisis because of warmer winters and really hot summers," says Professor Andrew Allan from the Faculty of Science.

The rise in winter temperatures risks crops not flowering well. Poor or non-existent flowering means either no fruit or low-quality fruit. At risk is the value gained from our premium fruit crops. Think of everything we and 127 markets overseas love to eat – such as apples, avocados and kiwifruit. But climate change also takes a toll on staples like potatoes and onions.

Andrew is a professor of biological sciences at the University, and Principal Scientist at Plant & Food Research, the Crown Research Institute. He is working on a five-year $14.5m Endeavour-funded project called 'The Flowering Crisis: Confronting a Changing Climate's Threat to New Zealand's Tree Crops'.

With his initial qualifications in plant biology, research has taken him from physiology to molecular biology to genomics. "I'm still basically a plant physiologist," says Andrew.

"My area of expertise has always been in the stress response of plants to environmental conditions."

At work he is just as likely to be in the glasshouse, examining and propagating new cultivars, as in his office. Research supporting the development of cultivars to entice new consumers had been his bread and butter, but now the challenge of climate change on crops is his focus.

"About ten years ago, my children asked: 'Dad, what are you doing about the climate crisis?'"

He had no direct answer and realised he needed to do much more.

Nowadays, Andrew is in a race, one that takes place over decades but is no less urgent despite the time span. On one side is developing plant cultivars that can stand up to, and even flourish, in a hotter climate. On the other, dealing with the shocks and jolts to ecosystems that climate change is bringing now.

The crops of the near future will need to withstand everything from higher temperatures to new pests and diseases that will establish themselves in a far less temperate Aotearoa New

Zealand, as well as bursts of erratic weather – Cyclone Gabrielle certainly sounded a warning, wiping out apples, wine grapes, kiwifruit, kumara and many other crops.

"My biggest worry is, can we breed new cultivars for an altered climate and will we be quick enough?"

The Ministry for the Environment has produced scenarios for Aotearoa based on global models. In a best-case scenario, by 2040, the mean temperature will rise in a range between 0.7 °C and 1°C. In a worse case, higher still. By 2090, the worst-case mean temperature rise across the country could be 3°C. Under even the best scenarios, the all-important frosts needed to set fruit will decrease by 30 percent, in the worst case by around 50 percent, by 2040.

This is a clear and present danger to an export sector that earns more than $6 billion a year or about 11 percent of the country's annual export earnings.

But traditional plant breeding is a methodical process that takes time; up to 20 years to develop a new fruit crop that's ready for the market.

Andrew says the only strategy to embrace is speed. "We're going to have to be fast because the climate crisis is fast. Scientifically, we also must be fast, because that means we can publish first and discover things quickly before others do."

There is a way to speed up the evolution of plants. Genomics is already in use in plant breeding, where researchers use markers for key genes, to know early whether attributes have been passed on to progeny.

Now, he says, New Zealand needs to grapple with the issues around gene editing. In the early years of this century, the prospect of genetically modified organisms was roundly rejected. Among the arguments against the use of genetic technology was the fear of unintended consequences and that it would damage the country's clean and green image.

"But what does the climate crisis do to our pure, untainted image? Clean and green could end up brown and dead. This scares the hell out of me."

In fact, gene technologies like CRISPR, which enable very precise gene editing, have now become a common part of the toolkit in biological and medical research. Gene technology can triple or quadruple the speed with which new crop cultivars are developed, and regulations are rapidly changing overseas to allow these gene-edited crops to be grown and sold commercially. In New Zealand, they are still classified as genetically modified, with strict regulations around their use.

In the lab, CRISPR is already being used to take out some of the repressors that stop plants from flowering when nights aren't cold enough.

"It means the plant is not so sensitive to the reduced number of cold nights it's experiencing. CRISPR uses an enzyme that goes into the cell and makes a variant in exactly the place you want it to. So, if you have a major gene that's stopping flowering, you can get the CRISPR enzyme to make a variant of that gene ... and then the plant will flower more often."
(Watch Andrew's explanation on YouTube at **tinyurl.com/YouTube-Andrew-Allan**)

Inevitably, he says, climate change will alter everything we do. With the country's wealth built on dairy cows, what if large herds of ruminant animals became unviable in a world beset with a rapidly changing climate?

The 2022 World Economic Global Risks Report shows that since the 1900s, 75 percent of plant genetic diversity has been lost as farmers worldwide swapped local varieties for genetically uniform, high-yielding varieties. The report says just 12 crops and five animal species now provide 75 percent of the food we produce. A lack of agricultural diversity, and biodiversity in general, contributes to climate change.

But what if, for example, the Canterbury Plains, now the home of dairy farms that are only workable due to large-scale irrigation schemes, again became a place where New Zealand grows only crops?

"Better crops feed more people," he says. "Crops fix carbon dioxide and make the soil better."

He says plants are a big part of the solution to many of the challenges faced by society.

"If we can make plants that are better for us, that are more attractive to eat, then we'll eat less meat. Eating less meat is good for our health and good for the planet," he says.

"But if we are to do this in time, we need new genetic technologies and we need to bring the New Zealand people with us, and convince them that this is safe and a good thing."

**This story is adapted from an article on the University's Mātātaki The Challenge website, a collection of stories about how our researchers tackle some of the world's biggest challenges. See: auckland.ac.nz/the-challenge**

**"We're going to have to be fast because the climate crisis is fast."**

– Professor Andrew Allan, Faculty of Science

**HONOURED**
In March 2023, Andrew was elected as a Fellow of the Royal Society Te Apārangi in recognition of more than 30 years researching plant genetics.

*Kiwifruit vines destroyed in Puketapu during Cyclone Gabrielle.* *Photo: Warren Buckland/ Hawke's Bay Today*

Taking Issue

# CAN ACADEMIC INTEGRITY PREVAIL WHEN AI IS SO GOOD?

**Three experts have 350 words to share their view on whether academic integrity can survive now we have AI's ChatGPT, which can write an essay in 60 seconds.**

*This artwork was generated by AI but these opinion pieces were written by humans. See Taking Issue's online version at* ***auckland.ac.nz/ingenio*** *for the ChatGPT-generated answer as well.*

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

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

Alex Sims

## LET'S EMBRACE AI IN EDUCATION AND WORK

There is no single definition of academic integrity. At the University, it is equated with "integrity and honesty". The University aims to develop its students' intellectual independence as well as maintain the reputation and quality of the University of Auckland qualifications.

ChatGPT and other AI tools have transformed the game. Students can use AI to provide fluently written answers in tests, exams and assignment questions. The concern is that AI-generated answers often pass without students needing much, or indeed any, knowledge of the subject matter.

But any proposal to ban ChatGPT and other AI tools, and to use AI detection tools to catch "cheating", is counterproductive. It is doomed to fail because AI detection tools are not 100 percent accurate; and it would be counterproductive because if students don't know how to use AI, they will be disadvantaged in the workplace. Companies are already using AI to create material for their clients, saving time and money. Knowing how to use AI is an employable skill.

Instead of entering a futile arms race between AI tools and AI detection tools, we need to embrace both the future and the past. For some assessments, students should be encouraged to use AI tools, but those assessment questions must change so we can better test students' knowledge through the semester. One advantage may be that students' ability to produce work in fluent English through AI means they can concentrate on demonstrating their knowledge through other means of assessment, instead of the current practice that can privilege students who write well over those whose technical knowledge is better than their writing. Students may also need to pay attention to what ChatGPT outputs to ensure it reflects their own values, especially as ChatGPT has been shown to demonstrate bias.

It is possible to construct ChatGPT-proof assessments, but it may require a radical rethink. Assessments vary between courses and subjects. ChatGPT's arrival involves academics unlearning decades of practice and experience. As such, our traditional notions of academic integrity must also change. We can look to the past with a twist. We could return to traditional pen and paper tests or exams (using Crowdmark to mark them online), with a requirement the student needs to pass the test to pass the course. That way, we can maintain the quality of the University's qualifications by guaranteeing students' knowledge of the subject matter. And so, integrity prevails.

*Alex Sims is an associate professor in the Department of Commercial Law at the Auckland Business School.*

Hazim Namik

## USE OF INVIGILATION IS THE KEY

For academic integrity to prevail, all that's needed is invigilated assessments, wherever possible. Before setting recent tests I, like many other academics, jumped into the world of generative artificial intelligence and challenged ChatGPT by asking it questions from courses I teach (engineering physics, hardware programming, and control systems). It gave average responses to physics and control-systems problems. It made conceptual and arithmetic mistakes in its answers and justifications, in the same way an average student would. Because you'd expect a student to make similar mistakes, detecting AI-generated code is more difficult than detecting AI's use in essay-style questions.

In creating a recent test, what I did was use ChatGPT myself and ask it to create some computer code. I then set a question in which students, under invigilation with no computers, had to analyse what was wrong with the code and why it might not work in the real world. Lecturer 1. ChatGPT 0. The bottom line is students have to understand the code to know why it may not work.

For sure, AI does have an impressive ability to write code, even for real hardware, such as a robot with a certain configuration. It can produce working code in the desired programming language with provisions to account for the physical properties of the hardware. At postgraduate level and senior undergraduate, I'd encourage its use and for students to then test its application. But in a student's first year, they need to know fundamental principles such as how to write, debug and fix their code. If they have no clue, they'll be found out.

It's also 2023 and we need 'authentic assessment', too. Students must be able to use computers for tests just as they do in the real world. An ideal might be to have exams on campus in computer labs for suitable subjects, with only certain programs loaded.

There are other innovative approaches we can adopt, but ChatGPT may always be one step ahead of us. AI tools will improve with each iteration, but so will AI detection tools. This is just the beginning.

Academic integrity will prevail if we are creative in our assessment methods. Invigilated tests and exams have a crucial role in protecting the reputation of academic institutions. They are not assessment tools of a bygone era. As teachers, we just have to think outside the box.

*Hazim Namik is a professional teaching fellow in Mechanical and Mechatronics Engineering.*

**"Academic integrity can prevail provided we are creative."**

Andrew Withy

## IT'S ALL ABOUT YOUR VALUES

Academic integrity is not a battle between cheats and enforcers, or a technological arms race between students and teachers.

It is ultimately an intellectual code valuing honesty, responsibility, accountability and professionalism. Students, tutors, lecturers, researchers and anyone else participating in a shared intellectual community must have some mutually agreed and respected norms of intellectual behaviour. Without this common behavioural code, global academic trust would collapse, and shared academic knowledge would devolve into a proprietary corporate, guild or apprenticeship model. That is, it could be the end of universities and public education. This would radically change society's fabric and endanger our democratic values.

Certainly AI enables those who do not accept the current academic integrity standards to cheat more efficiently with less risk. The problem is not the technology, but the values of these individuals. Ultimately, they value the acquisition of a credential more than the work required to master knowledge. How they choose to cheat is merely a matter of convenience and risk.

AI is currently convenient and low-risk. It removes the requirement for assistance by another human. Instead, it can be used in total secrecy. AI can also feel to students a lot like current best practice – they already research on the internet while writing on a gadget that has online spelling and grammar assistance. This means that how we understand, describe, teach, model, practise and assess our research and learning will have to change, so staff and students can better see where and why they are crossing the line. Some current best practices may even become unacceptable.

The shift in our communal practices will be bumpy and uncomfortable, and mistakes will be made. But we will find a new equilibrium between trust and quality assurance.

There's no denying AI text generators are becoming essential in many jobs. At some point soon, the associated legal and ethical issues may create unacceptable risks for businesses, and so commercial norms and practices will become established. Hopefully, these standards will not be too far from those academic integrity norms required for a vibrant research and educational community to thrive.

That way, academic integrity must prevail.

*Dr Andrew Withy is a professional teaching fellow in Philosophy in the Faculty of Arts.*

# Ancient mindset reaps timeless rewards

*Owen Eastwood is a New Zealander living in England, working as a top performance coach.*
*Photo: Andrew Fox, The Times/News Licensing*

Owen Eastwood credits a series of valuable personal connections for arming him with all he needed to become one of the most in-demand performance coaches in the world. He talks to Anthony Doesburg.

**"I was very lucky. Ngāi Tahu gave me a very powerful sense of the Māori part of my identity."**

– Owen Eastwood, performance coach

Whakapapa, an underpinning of Māoriness that gave a fatherless Southland boy a sense of belonging, is firing up sports teams, military commanders and ballet dancers worldwide.

Owen Eastwood has parlayed the warm embrace extended to him by Ngāi Tahu as a young boy into an in-demand international performance-coaching business.

Aged 12, at the urging of his paternal grandmother, Owen contacted the tribe after being left adrift from his heritage by the death of his Māori father. He died when Owen was five, leaving Owen and his three siblings to be raised by their mother.

When Owen wrote to Ngāi Tahu asking the question, "What do you know about who I am?", the answer, in short, was "You belong".

The reply welcomed him with a tribal registration number and a formal record of his Māori genealogy. And as Owen describes in his 2021 book *Belonging*, a "scruffy" unheaded second piece of paper listed 20 generations of his ancestors' names.

This was his introduction to whakapapa, both his personal history and what he says is a part of "the ancient code of togetherness".

Now 54 and living in the Cotswolds, England, with his wife and two children, Owen says he was very lucky. "Ngāi Tahu gave me a very powerful sense of the Māori part of my identity."

By a route that took him through the law schools of the universities of Otago and Auckland and a top London law firm, he's now preaching whakapapa at outfits as diverse as Chelsea and Manchester City football clubs, England Football, Cricket South Africa, NATO's command group and the Royal Ballet.

The aim is to help them form winning "teams". Although he declares he has no formal qualification, performance coaching has been Owen's work for the past decade, sidelining his legal career.

After being raised in Southland by his widowed mother, Owen went north to the University of Otago where he did a law degree and political studies as part of a Bachelor of Arts.

"Those two things added up to an interest in employment law so when I graduated, I went to Wellington and worked in that field.

"Then – and it's amazing how life turns on such little things – I read an article about Michael Jordan in *Sports Illustrated*.

"I came to a line that quoted his sports lawyer. Although I'd studied and was practising law, I'd never heard of 'sports lawyer' as an occupation."

As a fan of both sport and law, he thought he'd explore further, and consulted the Wellington Yellow Pages. Two sports lawyers were listed:

David Howman, who went on to head anti-doping agency WADA, and barrister and former All Black Jock Hobbs.

"New Zealand being the place it is, I cold-called them both, told them I was interested in finding out about sports law and asked if they'd sit down with me over a coffee.

"They both agreed and were warm and generous with their time."

David Howman's blunt message was that mere passion wouldn't get Owen far. He would need to prove to people he was invested in sports law.

"He told me about the University of Auckland's Master of Commercial Law degree, which included a sports law paper, and said with that qualification people would take me seriously."

Owen was hesitant about giving up paid employment to return to studying and accumulating more debt. "But David Howman's words rang in my ears."

In 1996, he took his advice.

He has good memories of his 18 months studying in Auckland, centred on the sports law classes of Professor Owen Morgan and Associate Professor Bill Hodge's "world-class" employment law teaching.

"Bill Hodge inspired me and took me under his wing a bit. He was interested in the fact that I wanted to amalgamate employment law and sports law, which I could do in that masters degree."

The social side of postgraduate life was also rewarding. "After classes, we would have a coffee or a beer. I probably met more people at Auckland than Otago, which is really sociable but where people would sprint off after classes."

He worked hard enough to get first-class honours. "I really enjoyed doing the masters and it took my life and career on a completely new trajectory."

His first break was at the Auckland Cricket Association, which was advertising for a sports lawyer. The role allowed him to combine hands-on law work with his studies.

Next stop was London, where his newly minted credentials landed him a job at leading employment law firm Lewis Silkin, and the task of setting up a sports law department.

"I spent the next decade doing that. It was a tremendous experience, which accidentally led to me becoming a performance coach."

The leap from law to coaching came about when he was doing a two-year sabbatical at Saatchi & Saatchi. In 2008, the ad agency was asked by Adidas to work on a review of its sponsorship relationship with the All Blacks, and Owen was assigned to the role. Adidas wanted an insight into the team's culture, and it couldn't have stumbled across a better-qualified person. Owen not only knew the All Blacks' coaches from having been the team's lawyer in the UK, but he was also in the midst of a personal quest to learn more about his Māori heritage and concepts such as mana and whakapapa.

"This was one of those great coincidences. At a time in my life when I'm reflecting on and learning about these ideas, I'm invited to get involved in Adidas's review of the All Blacks."

With the advantage that the coaches knew and trusted him, he discovered whakapapa was central to the team.

*Owen Eastwood, centre in light blue, has worked with Cricket South Africa among many other sporting teams.*

**"Doing the masters took my life and career on a completely new trajectory."**

– Owen Eastwood, author of *Belonging*

"It's just part of the All Blacks' normal vocabulary. These ideas happened to also be in my mind so we were talking the same language."

Owen hasn't stopped speaking it since.

"That's the point where I became interested in team culture and ultimately being a performance coach."

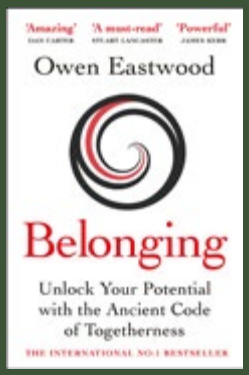
His technique is to create an identity story, the exercise he was engaged in on his own behalf when the Adidas assignment came along.

Owen says the good news for Kiwis on the international stage is we have "a bias towards 'we' over 'me'".

"It's definitely in Māori culture – tribe and whānau first – but also in the British and European pioneers who came here trying to break away from the class system."

The All Blacks have a unity of purpose that has seen them win four out of every five games they've played since the 1890s. As for stories, there are few to rival the one the All Blacks can tell from the 1895 Originals to the present, the key feature of which Owen says is diversity.

"From the start, the All Blacks have created a team culture that is very inclusive, and that's been part of our strength."




## Win

We have one copy of Owen Eastwood's book *Belonging* (Hachette, $38) to give away. Email: ingenio@auckland.ac.nz by 4 August with *Belonging* in the subject line and your postal address in the body.

# AGE *NO BARRIER*

If you're thinking of returning to study late in life, take a leaf out of Dr Waiora Port's book. By Denise Montgomery

*Dr Waiora Port completed her PhD aged 74. At 90, she's still on the Māori advisory board of the Centre for Brain Research. She also makes great pikelets.*

Doing an interview with Dr Waiora Port is like having a cup of tea with a Regency duchess.

At her home of 58 years, the aroma of freshly baked pikelets makes me wonder if she's forgotten the interview and is just busy baking. She hasn't forgotten; at 90, she's as sharp as a pin.

While we chat, she is dolloping her homemade jam onto the pikelets and topping each spongy bite of deliciousness with whipped cream.

It would be rude not to accept one.

"I'm sorry if I'm tempting you," says Waiora, in a sorry-not-sorry kind of way.

She serves tea in floral china cups.

"I get these cups out when I have visitors. I like to play ladies. It's an old-fashioned thing. The recipe is an old one, too."

Waiora (Te Aupouri, Te Rarawa) barely takes a breath as she talks about her extraordinary life and her role at the Centre for Brain Research. But she emphasises a Māori proverb: "Kāore te kumara e kōrero mō tōna ake reka" (the kumara does not speak of its sweetness).

Waiora embarked on her first degree at 56, completing a BA double major in Education and Māori Studies in 1992, aged 60. She already had a hard-earned primary teaching certificate from 1953, the equivalent of a degree, which included classroom placements, a probationary period and grading by inspectors.

"I'd been teaching at Richmond Road school for 15 years before I enrolled at the University of Auckland. I surprised myself by doing well."

She had started a bilingual unit there in 1985.

"We worked seven days a week making our own resources when there were none."

But she felt burnt out. "When you get crabby with children, you shouldn't be there because it's not fair. There must be joy in education."

She sparked joy in her own education with the decision to go to university at the same time as her youngest daughter. "Before that, I'd always been jealous of those who'd gone to university."

After her BA, her skills were sought by another faculty. "Geneticist Cyril Chapman from the Medical School wanted someone who could speak Māori to help him with his research on clubfoot, to speak to Māori families.

"Clubfoot is six times more likely in Māori than Pākehā."

She felt obliged to help, with clubfoot in her own whānau. She was also encouraged by Professor Ingrid Winship, who has played an ongoing role in Waiora's academic career.

**"I'd always been jealous of those who had gone to university."**

– Dr Waiora Port, Centre for Brain Research

Waiora took the 18-month contract, and initially thought she'd put her MA on hold, until Graham Hingangaroa Smith (Ngāti Porou, Ngāi Tahu, Ngāti Apa and Ngāti Kahungunu) and Linda Tuhiwai Smith (Ngāti Awa, Ngāti Porou), now professors, cajoled her into continuing.

"Graham and Linda were the best education lecturers… we did things in a Māori way together, helping each other."

Her MA thesis in 1995 combined skills learned in her BA with genetic research. The result was 'He mate huhua, he tirohanga Māori: Clubfoot, Māori attitudes to disability'.

Then came a PhD and her focus was now health research.

"I'm a social scientist, so medical science was all new for me."

Personally, it was tough because it was not long after she and husband Garth lost one of their five daughters to bowel cancer, aged just 43.

But it kept her busy at a difficult time.

"I learnt a certain amount about genetics, but mainly my role is to negotiate between clinicians and families; to be their speaker if they're too shy or just reluctant."

In 2007, aged 74, she earned her PhD in Māori and Pacific Health and Molecular Medicine, exploring DNA testing for cancer susceptibility, with a focus on the needs of Māori.

Waiora is now on the Māori advisory board for the Centre for Brain Research in the Faculty of Medical and Health Sciences. Its director, Distinguished Professor Sir Richard Faull (Te Āti Awa, Ngāti Rāhiri), describes her as "a warm, congenial, strong, extraordinary woman with a heart of gold".

"Waiora has been our rock for outreach and engagement with Māori. She also mentors our research group leaders and graduate students. She's our taonga."

# DISTINGUISHED ALUMNI AWARDS

Each year, the University recognises a group of alumni for their career achievements and contributions to the community. Meet the 2023 recipients.

## FATU FEU'U ONZM

**PGDIPFA 1998 (CREATIVE ARTS AND INDUSTRIES)**

While Fatu Feu'u was being interviewed by Jack Tame at the Taumata ceremony on 1 April, behind him on a video was one of his striking artworks, which depicts the horror of the 2009 earthquake and tsunami in his homeland Samoa. When he talked about that time, the image appeared to come to life through the anguish in Fatu's voice, as he recounted the destruction of the village in which he grew up, Poutasi.

"Poutasi is one of the most beautiful places … but the whole village was wiped out in 2009. A day after, I went back and there was no village. Huge boulders and fishing boats littered the road. The hospital was cut in half. The only buildings left were two churches."

Then he received the shocking news that nine of his family had died.

"I stayed to help rebuild the village. It's one of the strongest villages in Samoa in terms of the culture and, of course, its importance to me."

Fatu is an internationally recognised sculptor, printmaker, painter and ceramic artist who has created and exhibited Pacific art for more than four decades. In 2022, he received the Icon Award from the Arts Foundation Te Tumu Toi for his outstanding contribution to art and his role as a leader within the Pacific arts community.

His mother brought him to New Zealand from Samoa in 1966. "Earlier, she'd said, 'What are you going to do, you're no good on the plantation and you're no good at fishing?'"

"I told her I wanted to study art. Mum had no money to send me to art school, but she said, 'We have a very strong culture, go do your art and you can make yourself a future.'"

Fatu is indebted to have had support from Kiwi artists including Tony Fomison, Colin McCahon and Pat Hanly. In turn, he now supports developing artists through the Tautai Contemporary Pacific Arts Trust in New Zealand and the Fatu Feu'u Arts Centre in Poutasi.

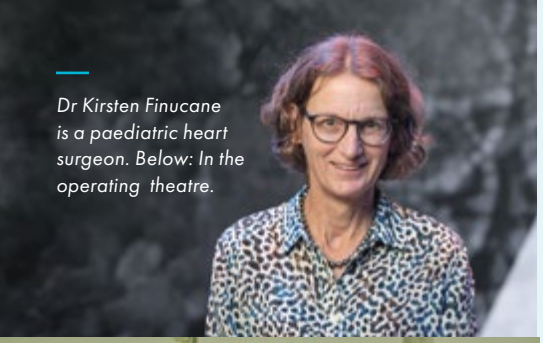
University of Auckland history lecturer Felicity Barnes and husband Michael Whitehead have also set up the Fatu Feu'u award to honour his role in Pacific arts. The award, $15,000 each year, will go to an excellent Pacific student in fine arts, drama, dance, film, screen production, music or creative writing – someone with the potential to have an impact on the creative capital of Aotearoa New Zealand.

Fatu says he's been meaning to retire but could also see himself as a successful negotiator. "The Western world, with all its power of negotiation, isn't using it properly. I'm talking about Ukraine, and the almighty power of Americans.

"They should be dealing with it, to improve those negotiations to try and get rid of this war."

**Watch the interview: auckland.ac.nz/taumata-fatu-video** ▶


*Artist Fatu Feu'u and his artwork depicting the 2009 tsunami's impact on his home village Poutasi in Samoa.* Taumata event photos: Richard Ng



*Dr Kirsten Finucane is a paediatric heart surgeon. Below: In the operating theatre.*

## DR KIRSTEN FINUCANE

**CNZM, BHB 1983, MBCHB 1986 (MEDICAL & HEALTH SCIENCES)**

When Jack Tame introduced the chief surgeon of the paediatric and congenital cardiac service at Starship Hospital, he handed her a walnut. It was a visual reminder for the audience at the Taumata event of the size of a baby's heart. For more than two decades, Dr Kirsten Finucane has led a paediatric and congenital cardiac surgery team at Starship. Her experiences there sparked a desire to improve access to cardiac surgery for children around the Pacific and, through the Hearts 4 Kids Trust, she has undertaken many trips to perform surgery in Fiji.

"When you're given a talent, you have a responsibility to use it for the good of other people in an equitable way. It seems wrong to me that children only a few hours away don't have access to simple interventions that can make a huge difference, like repairing a hole in the heart. We need to look after our fellow human beings."

It's that kind of humanity that also took Kirsten to Nepal for three months. There were benefits on both sides. Prior to that, Kirsten had the occasional propensity to faint at the sight of blood – known as the vasovagal reflex.

"The vasovagal thing is interesting. When I went to Nepal, that's where I realised I really could do surgery. Without fainting! Blood didn't make me faint any more and I think it was because I was too busy."

During her medical training, expectations of her becoming a cardiac surgeon weren't high. "They were fantastic lecturers but knew I was married and said, 'You can't do surgery and have children.' They thought they were being kind. Initially, I believed them because I respected them. But I knew I'd be good at it."

Once, she almost combined having children and performing surgery – literally. She was 36 weeks pregnant with the third of her three sons. "I went into labour towards the end of the operation. I finished and went home to get my bag. I had him at 3pm."

Kirsten has had to cede one passion – bass guitar. While a junior doctor she'd been in a punk band. "Sadly, I had to give that up. I mostly play piano now and just listen to rock music."

And her retirement plan is already locked in. "I want to get involved with propagating native plants down in Central Otago where they've almost disappeared. I've already started."

**Watch the interview: auckland.ac.nz/taumata-kirsten-video**

## JOSH BAYLISS

**LLB (HONS) 1996, BA 1996 (LAW & ARTS)**

How Josh Bayliss became the CEO of the Virgin Group and Sir Richard Branson's second-in-command is quite a funny story.

*Josh Bayliss and, below, with his boss Sir Richard Branson.*

He arrived at the Branson house for a job interview to find Sir Richard had double-booked. He told Josh the only way he'd be able to interview him was for him to come back the next day or go in the car with him to an event.

Josh took his chance and by good fortune, the pair were stuck in a terrible traffic jam. A 25-minute journey became two and a half hours.

"It was just brilliant. Richard ran out of questions after about 20 minutes, so I had two hours to interrogate him, which I thoroughly enjoyed."

He has now worked with Sir Richard for 18 years. "The level of trust he has in me and I have in him is really quite special. I also feel fortunate that I work for a business that doesn't have millions of anonymous shareholders. It is owned by one person who is a family man. And I work with his family very closely."

Josh has led the development of Virgin's strategy, creating new businesses in a range of industries and diversifying its investment portfolio. He is also an advocate for sustainability and the role business can play in tackling the threats posed by climate change.

"The reality is that governments simply don't have the tools, some may say they don't have the aptitude, to be able to address the scale of challenges we face in the world, environmentally and socially. Business has a role to play because there is a gap there, but also because it matters very much to business. If you want to recruit the best people, you need to be authentic in what you do as an operator and in facing the challenges."

So, how does that work when part of your business is running two airlines?

"We're not saying we are greener than green. We're saying we will be at the forefront of making the change that needs to happen. It needs to happen rapidly and will be good business for us.

"I would say to all businesses and CEOs out there, if you don't do that, your customers will abandon you."

If Josh wasn't doing what he was doing, he would like to be a teacher.

"I constantly threaten my children and say I'm going to give up my job and teach at their school."

**Watch the interview: auckland.ac.nz/taumata-josh-video**

## DR CHRIS TOOLEY

**DIPTCHG 1998, B ED MASSEY 1999, MA 2001, PHD CAMB 2006 (ARTS)**

Dr Chris Tooley (Ngāti Kahungunu) is an Indigenous rights advocate and business leader. He is CEO of Te Puna Ora o Mataatua, a health and social services provider serving the eastern Bay of Plenty.

Growing up in Auckland, he says he was detached from te ao Māori. It wasn't until his MA at Auckland that he began to reconnect with his culture.

"People like Linda Tuhiwai Smith, Pita Sharples, Hone Harawira, had a huge influence. Just having a cup of tea with them and sharing views shaped my identity and where I needed to go."

In 2002, Chris won the prestigious Gates Cambridge Scholarship that pays for potential leaders to study for four years. His doctorate at Cambridge University focused on the political philosophy behind self-determination.

While there, part of his research looked at words and their meaning.

"I wanted to prove that taken-for-granted words that we might use, like 'self-determination', are actually quite loaded."

He spent three months trawling the rare books archive in the library to find the first time the phrase 'self-determination' was written in a book. He found 'self-determining' in one from 1662, the first time it had been used.

"At that time it wasn't being used in a political context, that didn't happen until Woodrow Wilson."

He traced other words, too, to understand the concept of self-determination through the Western framework. His research taught him about critical thinking and kaupapa Māori. "When I was at the University of Auckland, the goal was for there to be about 500 Māori having done PhDs. Now there are thousands. That's got to be a cool thing."

Chris, an MP between 2009 and 2014 and the chief ministerial adviser for the Māori Affairs portfolio, won a Blake Leadership Award in 2020.

He says the partnership between Māori and Pākehā is critical in the coming years.

*Dr Chris Tooley says the University helped shape his identity. Below: Chris with whānau at the Taumata ceremony.*

"It's all about creating partnerships and opportunities. We have so much to give, both from a national and international point of view. With a partnership, Aotearoa will be better for it, if the momentum continues."

**Watch the interview: auckland.ac.nz/taumata-chris-video**

## YOUNG ALUMNA OF THE YEAR

## ELISE BEAVIS

**BE (HONS) 2016 (ENGINEERING)**

At just 28, Elise Beavis is an example of how to get what you want. As a teen, she sent an email to Emirates Team New Zealand (ETNZ) to ask if there were any jobs going. She was told no. She sent another email an hour later asking if she could just come in and talk. After that, she had an internship.

"She walked over to one of the biggest computers in the room," says Sir Ian Taylor, founder of Animation Research Ltd. "Next thing, engineer Dan Bernasconi is sitting beside it as Elise explains what they'll need to do aerodynamically if they're to use cyclists."

In 2015, she came onboard as ETNZ's youngest full-time employee. As a sailor, coach and youth Olympian, she has a career that combines her engineering expertise in computational fluid dynamics (CFD) with her sporting passion. Outside of Team NZ, Elise races in the WASZP, a single-handed hydrofoil. She used to race the Laser Radial class, but says she had to "work hard and go slow".

"I found it more appealing to work moderately hard and go fast."

Sailing by herself is a low-tech process with limited data needed, other than wind direction. "When I go sailing in a WASZP, I go with instincts, what it feels like, trim the sail or change the angle I'm pointing. It's about how things feel."

Her instincts work. She is the Women's WASZP World Champion and was New Zealand Female Sailor of the Year in 2022.

One of the buzzes she's had, apart from two successful America's Cup campaigns with ETNZ, is having kept a secret. "Using the bikes, cyclors, as grinders. It was incredible we kept that secret for so long."

The cyclor concept was tested in a wind tunnel at the University. "We went in to validate our CFD results. We use powerful computers to model what the air is doing as it flows over the boat."

The tests confirmed what the engineers had thought – that power output by cyclors at least matched traditional grinding. Elise says despite her field, there's no issue with being a woman surrounded by men.

"I was the only girl in my physics class; that didn't faze me, either."

**Watch the interview: auckland.ac.nz/elise/video**

Make a nomination for 2024's Distinguished Alumni Awards at **auckland.ac.nz/daa**

Watch the full ceremony: **tinyurl.com/DAAS-2023**

*Young distinguished alumna, engineer Elise Beavis, is preparing for ETNZ's defence of the America's Cup in Barcelona, 2024.*

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

# NATALIA PALAMO

*Tutuila, American Samoa*

**"I am an Island girl and I always will be."**

When Natalia Palamo talks about 'spies' being key to her role as an engineer for the American Samoa government, it's not espionage she's hinting at.

SPIES – South Pacific Indigenous Engineering Students – supported her as a young Samoan in the Faculty of Engineering from 2007 to 2010.

"The SPIES group was my home away from home," says Natalia, acknowledging the group's role in helping her studies by teeing up mentorships, leading to lasting friendships.

She also credits her Auckland Samoan family whom she says "housed, fed and cared for me" as she studied.

"They say it takes a village to raise a child. For Samoans, your village is an international one and you're a child until you graduate from university," she says with a laugh.

After completing her studies, Natalia's first engineering job was in New Zealand, but for the past seven years, she has been working in American Samoa.

As chief engineer for the Department of Port Administration, she heads the engineering division, making her responsible for capital and maintenance projects for three airports and facilities at six harbours scattered across five islands.

"The only way in and out of our islands is through our ports. This isn't just limited to cargo and imports, but also emergency relief during natural disasters, which unfortunately our islands are prone to.

"So we need to make sure our ports are kept operational and safe."

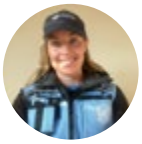
Natalia loves the challenges and travel that each project and location brings. And being based on Tutuila, American Samoa's main island, she is handily located to visit her parents in the Independent State of Samoa.

"They are only a 45-minute plane ride away. Being close to them was a big part of my move here. I am an Island girl and I always will be. I loved living in New Zealand, but it was never quite the same."

*Keeping cool island-style with a refreshing coconut drink on hand, Natalia Palamo inspects an airfield on Fitiuta Airport, Manua Island, American Samoa.*

## NICKIE WING

*Nairobi, Kenya*



**"I remind myself that small is beautiful, meaning one person can make a difference."**

UN humanitarian officer Nicola (Nickie) Wing, speaking en route to the Turkey-Syria border where she was to join the recovery effort after February's earthquake, says she has well and truly exited the University of Auckland's Sir Owen G Glenn Building.

That was her haunt as she studied for a Bachelor of Commerce from 2013 to 2016.

"I've definitely come a long way since the old OGGB days.

"But I would say the University of Auckland sparked my interest in an international career.

"I remember being super engaged in the geopolitics classes, and my interest grew from there."

Before her Turkey deployment, Nickie was living in the Kenyan capital Nairobi where she worked in the UN's regional office for co-ordination of humanitarian affairs. That followed a two-year stint in Ethiopia.

"This arm of the UN deploys in sudden-onset emergencies, whether they be natural disasters or conflicts, to ensure affected civilians receive critical life-saving assistance. I work in what's called the access unit, negotiating and facilitating access to the most hard-to-reach areas affected by disasters and conflict."

*Nickie visiting an IDP camp of communities affected by the conflict in Afar, Ethiopia.*

It's work in which each new day is never the same as the last, often in exotic locations.

"Ethiopia was truly fascinating. Being one of the only countries in Africa that was never colonised, the culture is rich.

"Everything there is different, even down to the date and time."

She offers the fun fact that in Auckland on 17 February 2023, the corresponding date in Ethiopia, which follows the Coptic calendar, was 9 February 2015.

One thing her work has taught her is the benefit of keeping things in perspective.

"Working in such high-pressure and often intense environments, it's easy to get overwhelmed.

"I always remind myself that small is beautiful, meaning one person can make a difference."

**"Living in Buenos Aires as an author, I feel I've finally found the balance I want."**

## AARON HODGES

*Buenos Aires, Argentina*

Great though New Zealand's meat pies and beaches are, and despite his studies sparking a passion for the environment and outdoors, Whakatāne-born Aaron Hodges has ended up 10,000km away writing fantasy novels.

The 33-year-old Bachelor of Science in biology and geography and Master of Environmental Engineering graduate has put down roots in Argentina.

It's been a winding path to his present career and home, Aaron says, with the University of Auckland playing a big part in getting him there.

"My studies and coursework gave me the discipline needed to create my own goals and deadlines, and stick with them. All those essays and reports helped refine my writing to be concise and to the point."

And as surprising as it sounds, the study of environmental science – understanding the connections between an insect's habitat and its quality of life, for instance – has supplied him with problem-solving skills to call upon when devising his novels' plots and characters.

"If A happens to character B, they will respond with action C, which then causes character D to … and so on," says Aaron.

His first foray into fantasy fiction was during his early university days. The writing skills he honed as a student were subsequently put to work polishing his debut story into the novel *Stormwielder*, and 22 other published titles have followed.

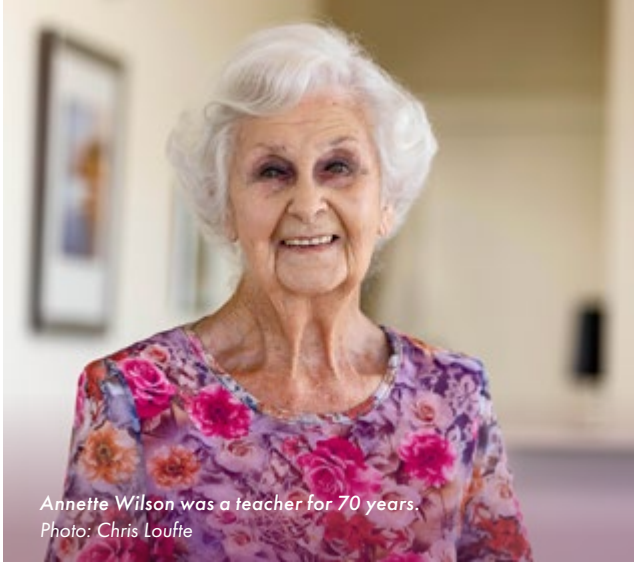
"I love creating new worlds and characters from nothing, then throwing them all together and seeing how things play out."

For Aaron, his present occupation and location beat a regular job, even if his favourite pastries and coastline are out of reach.

"Life is about balance. When I worked a 40-hour week in an office, I found I was saving plenty of money but had little social life.

"When I travelled the world from country to country, eventually I found myself feeling unfulfilled. Now, living in Buenos Aires as an author, I feel I've finally found the balance I want."

*Aaron Hodges at Sierra La Vigilancia, five hours' drive from Buenos Aires.*



*Annette Wilson was a teacher for 70 years. Photo: Chris Loufte*

# TEACHING TRIUMPHS

Annette Wilson's career in teaching spans many decades. Until recently, the 90-year-old was still helping children with their reading. She talks to Megan Fowlie.

When Auckland Teachers' College graduate Annette Wilson began her career, children lined up every morning. They marched into class with fingers curled and arms swinging. School corridors served as the new entrant classroom before bells rang and older pupils spilled into the space.

Seventy years on, Annette has only just given up teaching, most recently volunteering to help with reading at Glendowie Primary.

"I would love to continue, but I don't think children need an old face, do you?"

Annette explains that she has a new qualification. "When people introduce me, they say, 'This is Annette. She's 90!'"

Her smile suggests that over the years there have been a few thousand students gushing over their favourite teacher. She says she was a creative influence and far from the disciplinarian.

"My teaching career was truly a love of children, without looking for grading or promotion, because the rest of my world was so full."

That's not to say she doesn't do extra, even still. She is secretary of two bodies, a convener of two others and a patron of Northland Ballet.

Her career began in 1951 as "an immature 17-year-old with pigtails" from Titoki, around 25km from Whangārei. Her early aspirations of becoming a hairdresser or dress designer were sidelined by a nudge in another direction by career advisers who recognised her strengths. So, she caught the train from Whangārei to begin a two-year teaching course in Auckland.

Although homesick at first, she was rallied by the beauty and camaraderie she found at Rocklands Hall in Epsom. She still recalls the glass-walled circular staircase, the ballroom, and the romance of those years, which secured lifelong connections, including with then-warden Alix Warren. "Alix influenced so many lives – simple cares like the thruppence in your suspender to get yourself home in a taxi."

Later in life, Alix cajoled Annette to join the 'Old A's' committee. Now wound up, the alumni group has established an annual in-perpetuity prize of $1,000 for the best Summer Scholar in the Faculty of Education and Social Work.

Annette left the school system in the late 1950s until a callback came to complete more training in 1971. The narrative was, "If you don't take it, children will have nine relievers this year."

"I was enticed back, as a woman with three children and four dependent geriatrics at home. I was probably swimming upstream the whole time, although I was always well-organised."

Annette taught in Kamo East and then Kamo. She saw the impact of urbanisation policies on Māori communities. Families were brought in from their rural homes into urban lives along a ribbon-road housing development.

Inside and outside the classroom, reading was Annette's joy. "Reading was your whole world."

In 1983, she trained as a Reading Recovery teacher. With new approaches to literacy, she had to rethink the rigidity of the 1950s and became dedicated to the practices cemented by Dame Marie Clay, the architect of Reading Recovery.

"I found, given time, anybody could learn to read. I firmly believe that. Marie Clay said that, too. Whatever the problem, we could find a way around it."

During the 1980s, Annette became a 'culture representative' for the Hillary Commission and remembers being "spread like butter" between two tenacious sports representatives vying for dollars. After two terms of her smiles and perseverance, Whangārei had a theatre, and funding was split proportionally between sports, culture and social enterprise.

Back in Auckland, as "a very little minion", she helped organise the 1990 Commonwealth Games ceremonies with choreographer Mary Jane O'Reilly. At the same time, she was talent-spotted for a Reading Recovery position at St Michael's in Remuera. Annette stayed for 25 years. When St Michael's built a new hall, the architect factored in a Reading Recovery room with all the facilities.

"It was my dream world."

**"I found, given time, anybody could learn to read. I firmly believe that."**

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

# PERFECT POSITIONING

Art historian Linda Tyler showcases another of her favourite pieces from around 2,000 offerings in the University Art Collection.

Back last century when half a percent of the University's construction budget was lavished on artworks for buildings, living artists were tasked with making new artworks for specific nooks and crannies around the campus.

For the new Auckland Medical School in 1975, art consultant Hamish Keith applied his art budget of $20,000 imaginatively, commissioning a floor numbering system using Roman numerals in black and yellow Perspex from a recently retired Fine Arts lecturer, Colin McCahon (1919-1987). Another staff member, Pat Hanly (1932-2004), who had been a part-time drawing lecturer in the School of Architecture since 1962, rose to the occasion by painting a huge cycle of seven works dedicated to the Ages of Man. Two years later, Hanly was asked to choose artists to contribute works to the Arts-Commerce building at 14a Symonds Street, designed by Ivan Mercep (1930-2014) of architectural practice Jasmad (later Jasmax). In contrast to Keith, Hanly got $140,000 to spend, and ensured there were as many female artists as male when he commissioned the 16 works in mid-1982.

The Arts-Commerce buildings are now known as Arts One and Two or Te Puna Tangata and Te Puna Reo, and they are occupied by the Schools of Humanities and Culture, Languages and Linguistics respectively, with Commerce decamping to its own edifice, the Sir Owen G Glenn Building, in 2005. Mercep designed the lift foyers for the display of art, with level three of Arts One getting the most traffic. It is there that Don Binney's *Arts-Commerce Kākā* (named by the artist) hangs, facing everyone who has to turn left to exit the building. In the five years I have worked in this building, I have looked at this painting several times a day, always engaged by the way the kākā is so perfectly positioned in the sky over the Kaiaraara Valley on Aotea Great Barrier Island, with Hauturu (Little Barrier) in the background.

Birds are big in Binney's art, as they were in his life. The pioneer of modern birdwatching in New Zealand, Richard Broadley (Sibi) Sibson (1911-1994) was Binney's Classics master at King's College in Ōtāhuhu and was a huge influence on his protégé. Binney learned to draw birds as he saw them enlarged through binoculars. The artist's vantage point here is from near the summit of Mount Hobson (Hirakimata) where he walked in November 1981, contemplating the old kauri dam used to transport the 30 million metres of kauri felled during the heyday of the timber industry – the commerce of the work's title. Binney has depicted the dam carefully, showing how it was designed to use a trapdoor system, where horizontal beams attached to vertically placed planks would swing open when the river pressure mounted under the force of a flood from a storm. Positioned at the bottom of the painting, the dam looks like a cage from which the kākā has escaped, spreading its wings in alarm. Now, as we contemplate the devastating effects of flooding and the piles of slash left after timber felling, we can see the importance of Binney's vision, and how his composition asks us to pay attention to nature's delicate balance.

Arts-Commerce Kākā,
*1984 acrylic on board,*
*2010 x 1030mm,*
*Don Binney (1940-2012)*

***Linda Tyler (Faculty of Arts) holds the David and Corina Silich Associate Professorship in Museums and Cultural Heritage.***

**ARTY BOOK**

Auckland University Press will launch alumnus Greg O'Brien's book *Flight Path* on 16 October at 5.30pm in the lounge at Old Government House, where there are a number of Don Binney paintings from the University collection. Linda Tyler is writing a book on the University's Art Collection and invites stories from any interested alumni. Email: l.tyler@auckland.ac.nz

Music

# Innovation, creativity and all that jazz

**"Something happens when you're with other musicians and performing that I can't replicate off-stage."**

– Caroline Manins, singer, alumna, co-founder Creative Jazz Club

*Roger and Caroline Manins. Below left: In performance. Photo: Ben McNicoll*

## Janet McAllister talks to the founders of CJC, Auckland's Creative Jazz Club, Roger and Caroline Manins.

It's fun that it feels like a classic jazz dive. On a Wednesday night, you descend from the cheerful chaos of Karangahape Road eateries down two flights of stairs into darkness. A wall is draped in shadowy velvet, a French basket chandelier glimmers softly over the bar. The bar's name – Anthology – is the one bright hit, glowing neon cyan behind the low stage. If this were 1950s New York, Anthology would be full of cool cats smoking cigarettes.

As it is, we're jazz aficionados in comfy street clothes – from young students to retirees – here for the weekly CJC – the Creative Jazz Club. We've all paid to get in – not only for CJC to compensate its international, national and homegrown musical guests, and to secure serious equipment like the handsome grand piano, shining black – but also to ensure we really care. Through ticketing, "we could guarantee our audience wouldn't be there to hear 'Ipanema'", quips CJC co-director Dr Roger Manins, renowned saxophonist and University jazz senior lecturer. Instead, we care to hear original projects – CJC is a weekly engine for jazz innovation.

And tonight, we're in for a treat. Roger announces "the founder of CJC … our very own Caroline Minuscule", aka Caro Manins. The applause is warm for the singer and former University jazz vocal tutor, who will perform jazz arrangements of medieval songs, and her own medieval-inspired compositions, for the first time in five years, after a back injury left her in "vocal lockdown". Impressively, her clear, beautiful tones seem effortless.

"We started playing, and my voice opened up, and I think I also opened up. Music is amazing," says Caro later.

"Something happens when you're with other musicians and performing that I can't replicate off-stage."

This is dream-sequence, unearthly jazz – no lutes involved – playing with time signatures in ear-catching ways. The medieval songs are full of yearning and longing as troubadours pine for high-born ladies.

But one of Caro's own pieces is more contented – a vocal composition, initially recorded as an improvisation in the shower.

"It's called 'You'," says Caro in her introduction. "This is the only piece I've written for my 'You'. So, this is for him."

She sings a playful, relaxed, wordless, and softly staccato melody that evokes enjoyment of being together, of deep connection.

Her 'You' is Roger himself; the couple met 20-odd years ago at his 30th birthday party in Sydney – the English singer meeting the Āwhitu saxophonist. They enjoyed a lively party discussion but "It took six months for me to get her on side", reports Roger.

He invited Caro to a gig of his.

"And I could feel this huge brain energy happening … I thought this guy is actually really intelligent!" she laughs. It turned out he was transposing the music as he played "so that's why I was feeling all this concentration".

Roger and Caro moved to Auckland with their baby daughter Milli in 2004 to spend more time with Roger's mother, who had a life-limiting illness. Roger began teaching at the University jazz school casually then full-time and the couple started CJC in late 2009, a few months after Auckland's legendary London Bar closed its doors. Caro, who has a Master of Music (Performance) from the University, explains: "Music was relegated to background music in pubs or restaurants. I turned to Roger one day – I had my own music – and I said, 'Where do I play this?' There was nowhere, there were no decent pianos either. And we said, 'Well, let's create something.'"

Another saxophonist, Ben McNicoll, came on board as third co-director and web designer.

The links between the University and the jazz club are myriad.

"It's an amazing relationship," Roger says.

Where possible, he arranges for international CJC guests to feature in University jazz school forum workshops. Caro's superb band illustrates how CJC and the University regularly share personnel: linchpin jazz senior lecturer Ron Samsom is on drums, and the other band members were taught by both Roger and Ron (Jack Thirtle on trumpet, Ben Gailer on piano and some arrangements, Elliott Park on double bass, and Michael Gianan and Michael Howell both guesting on guitar). Jazz school students who occasionally volunteer on the club's door get free entry. Roger points out young musicians have been exposed to outside music at CJC for 13 years, informing their own "musically happening" projects, and then featuring at CJC themselves.

Where the 'Australian sound' is humorous and irreverent, the couple think Auckland's developing aural character emphasises originality: "Auckland is creative – I've seen so much creativity and individual musical growth happen here," says Roger.

He credits the University jazz school, CJC, and other outfits like the Audio Foundation and Vitamin S for fostering a free spirit approach. The core University jazz staff are "very open musically", says Roger. Roger himself is considered one of the leading saxophonists in the southern hemisphere. He has appeared as a featured soloist on more than 40 albums, with six under his own name.

"So, none of us were saying, 'Hey, jazz is like this. Jazz has gotta be be-bop, jazz has gotta be John Coltrane, it's gotta be European, it's gotta be free'. We've all just been open and done our own thing and we have different experiences, so we all brought an open mind to the table."

Roger's own artistic practice is a case in point.

"I'm musically really curious … so there's joy in everything if you let yourself," says the musician who has featured on six albums that have won Tui awards over the years.

He researched jazz improvisation and composition for his musical arts doctorate ("they're the same thing, really, composition is improvisation slowed down quite a lot"), but he has previously worked happily in rock bands, wedding cover bands, in musicals and playing jazz and blues in the subways of New York. You name it, he's done it, even working a cruise-ship stint for ten months.

"The challenges are exciting! Even if this is not my thing but their thing, I'll get joy out of that," he says.

"It's finding the joy in the small parts of the music which are insanely beautiful – every time you play a single sustained note. Getting the pitch, the dynamics of line. I tell my students, 'It's a whole world! It's a universe.'"

And many of those whole beautiful universes can be found every Wednesday, down two flights of stairs in the dark. ■

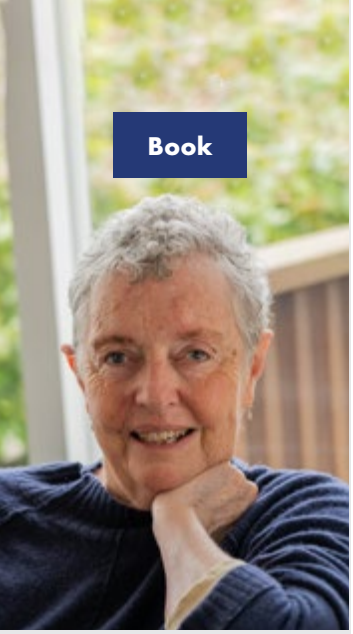
**creativejazzclub.co.nz**
**Wednesdays, 8-10pm,**
**Anthology Lounge,**
**375 Karangahape Road**

*Roger Manins is one of the southern hemisphere's most acclaimed saxophonists.*
*Photo: Ben McNicoll*

**"I've seen so much creativity and individual musical growth happen here."**

**Roger Manins, senior lecturer in jazz, School of Music**

Book



*Emeritus Professor Michele Leggott, MNZM, retired from the Faculty of Arts in 2021. A former poet laureate, she is an academic, essayist and editor.*

# Q & A: with poet Michele Leggott

**You've been researching New Zealand artist and writer Emily Cumming Harris for a long time. What drew you to her?**
We share a Taranaki background. Emily Harris landed with her immigrant family on the beach at Ngāmotu in 1841 when she was four years old. My brother, sister and I played on the same black sand 120 years later. Emily's first poems were written in New Plymouth and the idea that I had a poetic predecessor, shadowy but actual, was too good to pass up. I began a hunt for the poems that has taken me also to Emily's beautiful and botanically accurate paintings and drawings.

**How does a blind person research the work of an artist?**
Sadly, I did not encounter Emily Harris's paintings when I could see. But I know about archives and Emily is a consummate archivist of her work and her family history. I thought I could tell a good story about the Harrises, who were artists and teachers, almost all of them women, in the difficult spaces of colonial history. I was sure I could put Emily's paintings into play by working with researchers who can see. Over the years, I have learned that asking questions about visuals can elicit responses that are useful to all parties. You go deeper into a work when one question leads to another. It's like doing radio for pictures. Art historian Mary Kisler is a hero of mine.

**Where does poetry fit into this kind of enquiry?**
My Emily work was bounding along, though we still didn't have more than a handful of poems from the 1860s and 1890s. We know Emily had a body of poems because she was quoting from them around the turn of the 20th century, but that file or folder has disappeared. I didn't have Emily's poems, but I had an increasing number of my own responses to her life and career. They helped me think about the archival and critical project. Eventually, I came to see that they were part of *Face to the Sky*, the poetry collection that was shaping itself alongside the archival enquiry.

**So, research and poetry and then … cancer. What can you tell us about that?**
I was diagnosed with non-Hodgkin's diffuse large B-cell lymphoma just as Covid arrived in 2020 and the whole world turned upside down. Chemotherapy and radiation failed to eliminate the cancer. A stem-cell transplant in 2021 was also unsuccessful. I was referred for enrolment in the Malaghan Institute's CAR-T immunotherapy trial in Wellington, but for a long time, my blood counts weren't good enough to go on the trial. Then, in September 2022, they improved just enough and I was accepted. The team at Wellington Hospital collected T-cells from me and we went home to wait while the Malaghan scientists converted them into CAR T-cells. Malaghan's chimeric antigen receptor T-cells are modified to hunt down and destroy cancer cells. We went back to Wellington for the infusion of the transformed cells in November and three months later, this February, I was given an all-clear: complete metabolic remission. Simply put, CAR T-cell therapy saved my life.

**How do you fill your days now?**
I have two books to take care of. *Face to the Sky* is my eleventh poetry collection. The Emily poems are part of the book, which has a strong Taranaki locus and just a flavour of the cancer years. It was completed before I knew the outcome of the CAR-T and represents (for me, anyway) a knife edge that could have gone either way. The second book is my Emily Harris investigation, still in draft and with the entrancing prospect of becoming richer in scope and detail as we continue to make discoveries.

**Such as?**
We are chasing a promising lead that links Emily's paintings of weird and wonderful plants from the sub-Antarctic islands with specimens now at Te Papa, collected by botanist Thomas Kirk on his trip to the islands in 1890. Imagine: we can look at Kirk's dried specimens and match them with some of Emily's watercolours and oils. Art and science hand in hand.

**Like poetry and CAR-T?**
Yes. One has given me a new life, the other supplied respite from seemingly endless rounds of treatment. It took a long time to find my writing through the haze of fatigue and anxiety. But once I had it, the research and the poetry (and the poetry that is research), I could again put something into play, alongside the miraculous cells that were doing the heavy lifting. Body and mind, mind and body. A miracle.


*Face to the Sky, a poetry collection by Michele Leggott, Auckland University Press, $35*

# DELICIOUS TAKE ON NZ-CHINESE CULTURE

Filmmaker Jack Woon has engineered a creative path to showcase Kiwi-Chinese cuisine and culture. He talks to James Fyfe.

Alumnus Jack Woon is giving Kiwis a taste of New Zealand-Chinese food and culture.

He's the writer and director of TV show *Sik Fan Lah!*, a six-part series that acts as a gastronomical guide to Chinese food in Aotearoa, introducing a number of Chinese New Zealanders along the way.

The show, the name of which is a Cantonese phrase meaning "it's time to eat", aired on TVNZ this year and is now on TVNZ+.

Jack says the idea of the series is to convey just how diverse Chinese culture is through our universal love of food, while also giving us a glimpse into the lives of Kiwis with a Chinese background and hear their stories about growing up in Aotearoa.

Faced with the arduous task of trying to cover such a varied culinary culture, each episode of the show is hosted by a different person, providing a range of voices and experiences. Hosts include *MasterChef* winner Sam Low, Black Fern Tyla Nathan-Wong and Abigail Masengi, studying Health Science and Global Studies at the University of Auckland.

"We tried to pack in as much as we could, just to convey that central idea that this is exciting because it's diverse," says Jack.

Although the series revolves around food, the conversations that take place around the dinner table also touch on deeper themes, such as identity, race and parental pressure.

Born in Malaysia, Jack moved to New Zealand when he was five. Coming from an engineering family – his father and three older brothers are all engineers – he was expected to go into the family trade. His real passion, however, always lay in film and television work. After completing a conjoint Bachelor of Engineering and a Bachelor of Arts majoring in Media, Film and Television, Jack graduated with a Bachelor of Arts (Honours) in Screen Production in 2010.

More than a decade later, after having worked on everything from feature films to nature documentaries in China, Jack says making *Sik Fan Lah!* was "one of the easiest projects I've ever done", thanks to the talented cast and crew he worked with.

"You just put some food there, and then the stories come out," he says.

The show was shot during a two-month road trip from Auckland to Otago in 2022, an experience Jack describes as an "epic holiday".

Filming during a pandemic meant it wasn't all fun and games, though. Strict Covid-19 regulations brought endless RAT tests for the crew and constant bureaucratic red tape to cut through – something Jack says was only made possible thanks to the "brilliant, just brilliant" work of Abba-Rose Vaiaoga-Ioasa, another University of Auckland engineering graduate who is now working in the film and television industry.

Covid-19 regulations also meant they weren't actually allowed to eat the delicious food being served up on screen, something that was "pretty tough on the crew".

Pandemic-related complications aside, Jack, 37, says the very fact that a series like *Sik Fan Lah!* exists at all shows how much New Zealand has evolved in recent years.

"I absolutely would never have thought the show would be possible when I was younger," he says, adding that he would like to see even more Asian New Zealand voices on TV in the future.

"In New Zealand, about 15 percent of the population are Pan-Asian, but we definitely don't see that represented on our screen."

By sharing the experiences of other Chinese New Zealanders, Jack hopes shows like *Sik Fan Lah!* will help redefine what it means to be a Kiwi.

"Our philosophy for this show is that we are Kiwis – Kiwi Chinese are normal Kiwis. We are a part of New Zealand and a very important part of its history as well."

*University of Auckland student Abigail Masengi cuts up a Chinese-style whole pig in* Sik Fan Lah!

**"You just put some food there, and then the stories come out."**

*– Jack Woon, writer and director, Sik Fan Lah!*

*Jack Woon with co-producers Jess Wong and Abba-Rose Vaiaoga-Ioasa (right).*

Books

Professor Felicity Goodyear-Smith

# TURBULENT HISTORY

A new book tackles one of the country's flashpoint topics. By Jodi Yeats.

Professor Felicity Goodyear-Smith tackles the issues around abortion in *From Crime to Care, the History of Abortion in Aotearoa New Zealand.*

Academics at the University's medical school had key roles in the establishment of the country's first abortion clinic, where Felicity subsequently worked as a certifying consultant. Her book focuses on the story of that clinic, opened in 1974, in which her teacher, mentor and friend Dr Rex Hunton had a pivotal role.

"Rex wanted a history of the AMAC (Auckland Medical Aid Centre) to be recorded, and of the turbulent and bitterly contested history of abortion in New Zealand," Felicity says.

In the book's preface, Felicity recalls being a student in the 1970s and taught by Rex and Father Felix Donnelly in the Department of Community Health, now General Practice and Primary Care. Felicity has worked there for two decades.

"The dean, Professor Cecil Lewis, said to them, 'Go out to GPs in the area and ask what the most difficult problem is they are facing. They came back with issues around sexual orientation and women who were unhappily pregnant," Felicity says.

Rex and Felix started offering counselling in a pink cottage on the grounds of the med school.

"Rex generally counselled women with unwanted pregnancies and Felix those grappling with their sexual orientation. Rex saw many women who were desperate. They had no real choices. It was very difficult to get approved for an abortion and you needed money to go to Australia if you wanted an abortion."

At that time, Rex was a senior lecturer and general physician with an interest in counselling. With colleagues from other disciplines including law and social work, he helped set up the Auckland Medical Aid Trust and open the clinical centre in Remuera in 1974.

Psychiatrist Professor John Werry and physician Dr Robin Briant, who was researching at the medical school, were both trained as abortionists and worked part-time in the clinic.

"Australian Dr Jim Woolnough joined the clinic when it first opened. He was subsequently charged with conducting illegal abortions and went through two trials. The first, in 1975, was a hung jury and in the second, later that year, he was acquitted."

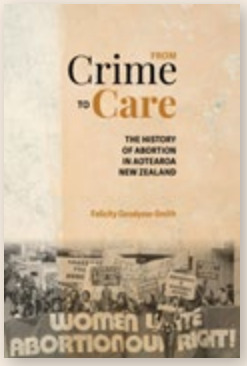
Police raided the clinic and seized medical files. They approached women and questioned them, often in front of family or colleagues who didn't know they'd had an abortion.

Meanwhile, groups for and against rallied. The clinic was subjected to fire-bombs, intense protest action and arson, and its clinicians were harassed.

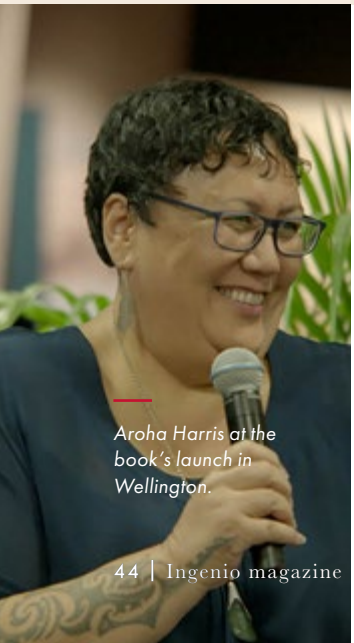
In the 1980s, Felicity worked in women's health in Freemans Bay and became a certifying consultant working shifts in the AMAC. She continued doing that until lockdown in 2020 when legislation passed that made her role redundant. Abortion has now moved from the Crimes Act 1961 into law governing healthcare, and abortion services brought into the fold with other women's health services.

In her book, Felicity sets out to fairly represent all sides of the divisive debate. Bernard Moran, a long-time supporter of the Society for the Protection of the Unborn Child, gave her plenty of material to work with.

"I said to him, 'I really want to give everyone a voice, but clearly I am pro-abortion.' He said, 'Of course, I know that.' He was happy just to have his voice in the story."




*From Crime to Care, the History of Abortion in Aotearoa New Zealand,* Verity Press, $40



Aroha Harris at the book's launch in Wellington.

# RICHNESS OF PAST

A new book aims to support the Aotearoa New Zealand Histories curriculum in schools, now implemented for Years 1 to 10.

It's a special edition of a long-standing series authored by a collective of Māori historians known as Te Pouhere Kōrero.

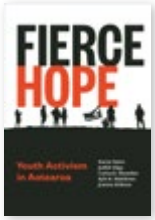
*Te Pouhere Kōrero 10: Māori History, Māori People* includes contributions from Associate Professor Aroha Harris and Associate Professor Ngarino Ellis from the Faculty of Arts, and independent researcher and former lecturer Dr Melissa Matutina Williams.

"For those unsure of how they might teach Māori and iwi histories, we hope this special edition provides some value, insight and direction," says Aroha.

She also hopes classrooms will develop familiarity with the histories of their communities. "Appreciate the richness of our pasts, open your hearts and minds to history being everywhere all the time. If we learn to love our history, we can learn to love each other and not feel threatened."

**Full story: auckland.ac.nz/aotearoa-history-book**

# IDEAS OF HOPE




This book on youth activism in New Zealand, *Fierce Hope: Youth Activism in Aotearoa*, focuses on six influential activist groups with causes ranging from Indigenous rights and sexual violence to climate change and justice reform. One of its co-authors is a sociologist at the University Dr Carisa Showden.

Local members of ActionStation, Generation Zero, InsideOUT Kōaro, JustSpeak, Protect Ihumātao and Thursdays in Black talk about the future they want for the country, and how they believe we can get there. The book started with the idea of investigating two different narratives about young people, loosely defined as 18 to 29.

"Either that they're being overly optimistic or naive, or that they're too nihilistic. We were really interested in what was driving these youth-led organisations, what makes young people get involved and sustains them in this work and what their hopes are."

Funded with a Marsden grant, the project started in 2018 and extended through to the first Covid lockdown in 2020. "It felt as if we were on the precipice of harnessing what we'd learned and doing things differently. I don't think that's eventuated, unfortunately, but there was definitely a sense of possibility."

The book is a collaborative project, but with individuals taking the lead on researching and writing about each group. One of Carisa's groups was Thursdays in Black, a New Zealand branch of an international organisation who dress weekly in black and hold events to raise awareness of sexual violence. "There are feminist activists in the US who talk about the 'teaspoons' approach', emptying out the ocean, one teaspoon at a time; the ocean is oppression, and the teaspoon is social justice. You can see groups like Thursdays in Black working like that, making a difference with small, regular actions."

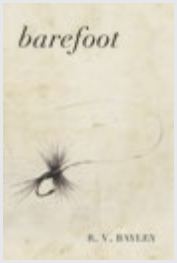
The authors interviewed members of each group and followed up a year later, as well as observing meetings and events and through following the groups on social media.

They believe the book is useful not only to scholars and the groups it features, but also to the wider activist community, and perhaps also to those looking for inspiration to get involved.

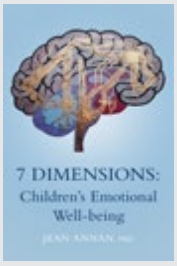
*– Julianne Evans*

**Full story: auckland.ac.nz/fierce-hope-book**

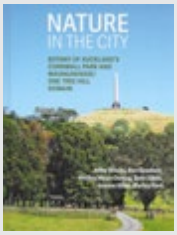
Fierce Hope *(Bridget Williams Books), Carisa Showden, Professor Karen Nairn, Dr Judith Sligo and Kyle Matthews (University of Otago), Professor Joanna Kidman (Victoria University), $40*



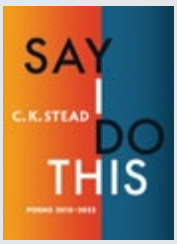

**Barefoot**
This is Master of Creative Writing and History alumna Ruth Bayley's first novel and is about two people in love: one stranded in the reality of the local war effort, the other in the desolate battlegrounds of far-off lands where danger and death are always imminent. Ruth works in the Faculty of Medical and Health Sciences.
**Ruth Bayley, Eden Street Press, $30**




**7 Dimensions: Children's Emotional Well-being**
Dr Jean Annan is an alumna and educational psychologist. Her book introduces a framework to help adults make simple sense of the plethora of information available about young people's feelings, thoughts and ways of responding.
**Jean Annan, Mary Egan Publishing, $39**




**Nature in the City: Botany of Auckland's Cornwall Park and Maungakiekie/One Tree Hill Domain**
An illustrated book by Science alumni Mike Wilcox and Shelley Heiss-Dunlop, with Ben Goodwin, Beth Gibbs, Joanne Alder and Marley Ford. It describes these parks' diverse plant life including lichens and fungi, and birds.
**Auckland Botanical Society, $60 (hardback), aucklandbotanicalsociety@gmail.com**




**Say I Do This: Poems 2018-2022**
Emeritus Professor C.K. Stead reflects on home, away, and friends, living and dead. Emeritus Professor Mac Jackson writes that the collection is resounding "with intimations of mortality compounded with reactions to a contemporary world of pandemic, climate change and war, but this collection is not in the least morose".
**C.K. Stead, AUP, $35**


**Golden Days**
This is Master of Creative Writing alumna Caroline Barron's second book (following her award-winning memoir *Ripiro Beach*). *Golden Days* is a psychological novel about the intense late-teen friendship in 1995 between Becky and Zoe and what happens when one terrifying night changes their lives and friendship forever.
**Caroline Barron, Affirm Press, $38**


**It's Not Rocket Science: A Guide to the School Improvement Cycle**
Education alumnae Dr Frauke Meyer and Dr Linda Bendikson give guidance on leading school improvement effectively. The book aims to support principals and other school leaders, using case studies and examples that show steps towards improvements that work.
**Frauke Meyer and Linda Bendikson, Myers Education Press, $40**


**The Secret Life of Number 8: the Science of Everyday Materials**
Emeritus Professor of Engineering Neil Broom writes about commonplace materials that have shaped the course of technological development up to modern times. Neil explains how each material has characteristics we might either exploit or take special care to avoid.
**Neil Broom, Mary Egan Publishing, $40**

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**Twitter:** @AucklandAlumni
**Instagram:** @AucklandAlumni
Email: **alumni@auckland.ac.nz**

VOLUNTEER

## TO BECOME AN **ALUMNI COORDINATOR**

It's 2023, we're looking ahead at how things are changing, and we've reignited our global engagement events to connect with our alumni and friends. This growing community is truly international and our alumni play a key role as advocates and advisers in cities all around the world. Visit the alumni relations website to see if we are coming to your region; we'll be in touch with more information as soon as we are close.

One way you can get involved is to become a Volunteer Alumni Coordinator (VAC). VACs provide the University with the very best knowledge about their local communities and they become a point of contact for alumni living in the area.

If you're interested in becoming a VAC to support University of Auckland alumni activities in your region, flick us an email to **alumni@auckland.ac.nz** or see **auckland.ac.nz/become-a-vac**.


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MENTOR

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The University of Auckland Alumni-Connect platform is an easy-to-use and powerful tool that allows you to become a mentor.

Alumni-Connect involves 'flash' mentoring, meaning you can have a significant impact on the next generation without it being a significant call on your time.

For new graduates, it can be tough to envisage a career. If you get involved, you can provide advice and the wisdom of your experience to greatly benefit our graduates.

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INSPIRE

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## RAISING THE **BAR**

Raising the Bar takes academics out of lecture theatres and into bars around Auckland. On Tuesday 29 August, 20 thought-provoking speakers will talk in ten bars around the city, offering the public an opportunity to engage with stimulating thinkers. Keep an eye on **rtbevent.com/auckland** for updates on the speakers and topics for this free-ticket event, which always sells out.


WATCH

## OUR **WORK WEBINARS**

Connect & Develop is an ongoing series of webinar talks, designed to give the University community the tools to grow in the new world of work. It's delivered by alumni who are experts in their field. You can view our April webinar, featuring 40 Under 40 member Michal Garvey sharing her insight into modern entrepreneurship, and sign up for other webinars in the series scheduled for later in the year at **auckland.ac.nz/connect-and-develop**.


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Plus, if you update or confirm your details before 31 August 2023, you'll go in the draw to win one of six UE Megaboom Bluetooth speakers.

Visit: **alumni.auckland.ac.nz/update**

# Ingenio

ALUMNI MAGAZINE

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# 20 YEARS


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