August 2024 • auckland.ac.nz/UniNews



LISA REYNOLDS

LSD and the healing power of nature

Page 6

ON THE

Architecture student and high school teacher's ambitious build Page 3

INCREDIBLE GIFT

Celebrating 30 years of the world's 'best little brain bank' Page 8

SEEING STARS

Inside astrophysicist Jan Eldridge's sci-fi themed space

Page 12

IN THE **NEWS**

A selection of University staff and students who provided expert commentary in the media recently. Let us know! Email: uninews@auckland.ac.nz.



REAL-LIFE STAR WARS

What would a war in space look like? Chris Jackson, Mission Operations Centre lead at Te Pūnaha Ātea Space Institute, told RNZ's The Detail that satellites are involved with everything we do, and the impact of any space conflict could be severe. "I think society would take a serious step backward," he said.

Link: tinyurl.com/rnz-jackson-space



RELAX, MISTAKES ARE FINE

Abigail McClutchie, a library Kaiārahi, spoke about the importance of the recently opened ReoSpace on Level 1 of the library. Abigail talked to a variety of media outlets including TVNZ's Breakfast and Te Karere, Whakaata Maori, NewsTalk ZB and Stuff.

Links: tinyurl.com/ReoSpace-Stuff tinyurl.com/ReoSpace-Waatea



SĀMOAN DISCOVERY

Associate Professor Ethan Cochrane's significant archaeological findings in Sāmoa featured on ABC Pacific, RNZ Pacific and in Cosmos magazine. Ethan has made connections between ancient structures, areas of fertile land, rapid population growth and the rise of chiefly classes.

Links: tinyurl.com/cosmos-cochrane-samoa tinyurl.com/rnz-cochrane-samoa



SCREEN ADVICE FOR SCHOOLS

Kiwi children have one of the highest rates of screen use in the world. Lead researcher and paediatric physiotherapist Julie Cullen (FMHS) led evidence-based recommendations for schools on how to balance teaching children digital skills without harming their health, as she told TVNZ's Breakfast.

Link: tinyurl.com/1news-cullen-screens



IT TAKES A VILLAGE

Dr Asha Sundaram (Business School) called extending paid parental leave to grandparents, as in Sweden, a win-win-win. Talking to TVNZ's Seven Sharp, she said children spending time with grandparents allowed parents to get back to work quicker, provided income and value to grandparents, and behavioural benefits for kids. Link: tinyurl.com/tvnz-sundaram-leave



SPIKE IN EATING DISORDERS

Hospital stays for eating disorders went up by 50 percent during Covid-19 lockdowns, according to Associate Professor David Menkes (FMHS). They had been rising gradually prior to 2020, but surged upwards during the pandemic, including doubling for Māori, he told RNZ's Afternoons with Jesse Mulligan.

Link: tinyurl.com/rnz-menkes-eating

THIS ISSUE

Charlotte McKeon	3
Good to Know - Conrad Pilditch - University delegation to Sāmoa - Fundraising Fellow named - Incredible Science - APRU conference	4
Cover story: Lisa Reynolds	6
Brain bank turns 30	8
Te Oti Rakena	10
Ngahuia Harrison	11
My Space: Jan Eldridge	12

Cover photo: Chris Loufte

Editor: Caitlin Sykes caitlin.sykes@auckland.ac.nz Photography: Chris Loufte, William Chea Design: Mariyam Poonawala, Jericho Jayme Production: University of Auckland Volume 54 - Issue 6 - August 2024 Published by: Waipapa Taumata Rau, University of Auckland Communications Office, Alfred Nathan House, 24 Princes Street, Private Bag 92019, Auckland 1142 Web: auckland.ac.nz/UniNews

Something to share? The next UniNews is September 2024, copy due 14 August. Email: uninews@auckland.ac.nz

For the fortnightly Whaimōhio The Loop newsletter, email: staff-comms@auckland.ac.nz. Deadlines are on the intranet under News, Events and Notices, The Loop.

When posted, UniNews is delivered in certified degradable EPI packaging in keeping with our sustainability goals. In PDF, this document has clickable links to any URLs.

CHARLOTTE MCKEON: **BUILDING A** BETTER FUTURE

Architecture student Charlotte McKeon is leading an innovative housing project to equip high school students for successful trades careers.

At One Tree Hill College, the sound of pounding hammers, humming saws and chattering students fills the air.

It's a sunny Tuesday winter morning and the students are hard at work, tearing down walls and pulling up the flooring of a 1970s ex-state house from Kāinga Ora.

They'll spend the rest of the year transforming it into a healthy, dry home as part of an initiative to give students handson experience that prepares them for trade apprenticeships and future employment.

The completed home will be auctioned in December, with the proceeds supporting the continuation and expansion of the programme, ensuring future students have similar opportunities.

This ambitious project is led by Charlotte McKeon, a trades teacher at the school who is also in the third year of her architecture degree at the University of Auckland.

The students are involved in every step of the renovation, and have been overwhelmingly positive about the project since the house arrived in late May, says Charlotte.

"Students were here early in the morning, even in the rain. They are here before school, and they're here after school. We can't keep them away. It's a wonderful problem to have such enthusiastic students."

About eight students work on the house at a time, guided by Charlotte and a licensed builder. With only an hour at a time to work on it during the school's trade class period, many also show up for Saturday classes to spend more time on the project.

Charlotte started at the college as a metalwork teacher before heading overseas, then returned about eight years ago. She says the project is a hands-on opportunity to apply her architectural studies and inspire students.

"I looked at becoming a builder, and when I went to BCITO (Building and Construction Industry Training Organisation) to talk to them



about it, they said, 'You're nearly 50, you might want to think about not climbing on a roof. How about you look at something else?'

"I looked at being a draftsperson, but then someone told me that I'm too bossy and would be better being an architect."

It wasn't a career path she had considered before, but it made perfect sense.

high-quality training, preparing them for successful trades careers.

The house will also be upgraded to a certified Homestar level seven home, making it more sustainable, easier to heat and more cost-efficient in terms of running expenses, according to the widely used rating tool for builders and homeowners. The idea came to

"Students were here early in the morning, even in the rain. They are here before school, and they're here after school. We can't keep them away."

- Charlotte McKeon

"With the help of incredible people at the University, I've been able to maintain a full-time job, raise two teenagers and come to university. I feel so grateful for all of that. It's awesome for my own children to see that someone can go to university and go to work and pull it together."

She says balancing her many responsibilities can be challenging at times, but it's also incredibly rewarding.

"The joy of learning and seeing opportunities for improving building practices makes getting up very early every morning worth it. While the scheduling can be frantic, life is busy anyway, and you might as well be frantic doing something you love."

The house came from Mangere East and was occupied until ten months ago when work on upgrading the area's housing stock began. Kāinga Ora made the home available to the college for a nominal fee and arranged its transport to the site.

The initiative is part of the social housing agency's efforts to support trade apprentice training, and contribute to the ongoing development of skilled workers.

With additional backing from BCITO and other sponsors, the project offers students

Charlotte after she heard about it in one of her university classes.

"Kāinga Ora is interested in understanding how we're doing it so that information can be shared with our communities, and everyone can have a healthy, dry house."

The project also involves 17 young women. Women in Trades, a non-profit dedicated to promoting trades as a viable career path for women, is providing support as a programme partner.

"We know that in the industry, women are much more accepted than they were in the past, which is super, and our girls see no barriers to that. They are in more than the boys, which is great."

After completing her bachelors degree this year, Charlotte plans to pursue a masters, focusing on how state houses can be improved so everyone can live in a warm, comfortable and affordable home.

"The sooner we can do that with our stock in New Zealand, the healthier our people will be and that will be better for all of us."

Hussein Moses

View the story online to see a video of the One Tree Hill College project.

GOOD TO KNOW

TURNING THE TIDE

Professor Conrad Pilditch was thrilled to take up his role as director of the Institute of Marine Science in July.

"If you want a leadership role in marine science in New Zealand, this is probably the best job in the country," says Conrad, citing the institute's leading scientists and resources, including the Leigh Marine Laboratory and research vessel *Te Kaihōpara* (*The Explorer*).

Conrad grew up in Tauranga, where he loved fishing, diving, sailing and swimming. It made a marine science career a no-brainer, he says.

He previously worked at the University of Waikato for more than 20 years, and for the past eight helped lead the biophysical research in the Sustainable Seas National Science Challenge.

He has taken on the position from Professor Simon Thrush who, after a decade in the role, will now focus on his own research and further building philanthropic support for the institute.

Like Simon, Conrad isn't an ivory tower academic, and understands the importance of connecting with iwi, communities, industry and policy makers to share what the science says about restoring our degraded marine environments.

He's enthusiastic about communications efforts such as the documentary series *Turning the Tide*, which was funded by the science challenge, and the Sustainable Seas website, which features an AI search tool to make research accessible.

Conrad's wife, Professor Karin Bryan, a fellow marine scientist, has also joined the University.

She studies coastal processes to understand the impacts of sea level rise, catchment runoff and changing climate while we still have time to adapt. Karin is crossappointed to the School of Environment and the Institute of Marine Science after formerly working at the University of Waikato.





'TEAM SĀMOA'

TOUCHES DOWN

In her first visit to the country, Vice-Chancellor Professor Dawn Freshwater travelled to Sāmoa in July, strengthening commitments to support Pacific-led research and ensure effective tertiary pathways for Sāmoan students.

Professor Freshwater was accompanied by Pro Vice-Chancellor Pacific Professor Jemaima Tiatia-Siau, who dubbed the University's delegation 'Team Sāmoa'. The delegation also included Sili-Mireta Ropati, Pacific portfolio lead from the office of the Pro Vice-Chancellor (Pacific), and Sāmoan language lecturer Lemoa Henry Fesulua'i.

Professor Freshwater met with National University of Sāmoa Vice-Chancellor Professor Tuifuisa'a Patila Amosa and Deputy Vice-Chancellor Peseta Dr Desmond Lee Hang to sign a university-wide Memorandum of Understanding that will boost connections between the two universities for students, academics and professional staff.

Professor Freshwater said being in Sāmoa for the signing was significant, given the relevance and importance of the Pacific and its connection to Aotearoa New Zealand.

Face-to-face meetings allowed for greater engagement, she said, ensuring the delegations from both universities were able to extensively discuss many of their shared goals for Sāmoan students.

The trip also included a meeting with Sāmoa Prime Minister Afioga Fiamē Naomi Mata'afa and a gathering of the University's Pacific alumni, organised by Alumni Relations and Development.

Full stories: auckland.ac.nz/uoa-nus-mou and auckland.ac.nz/alumni-meet-samoa

A GIFTED FELLOW

Congratulations to Fraser Alexander, the University's planned giving manager, who was recently named a Fellow of the Fundraising Institute of New Zealand (FINZ).

Fraser's role involves dealing with people who wish to leave a gift in their will to the University, often fulfilling a wish to fund important research or other causes close to their heart.

"They're people who want to support great medical research that will hopefully prevent or treat some of our worst conditions, or they want to support a student who's battling financially to have the opportunity to achieve at a high level. They're very modest, humble people."

FINZ has just 14 active Fellows – individuals who have demonstrated more than a decade of distinguished fundraising service – but Fraser says that, like many people working in fundraising, he fortuitously fell into it.

Visually impaired, he began his fundraising career in 1997 working for the Royal New Zealand



Foundation of the Blind (now Blind Low Vision NZ), drawn to the stories of those who would leave gifts to the organisation.

A BSc graduate of Waipapa Taumata Rau, he moved to the University in 2006, where he leads the Gifts in Wills programme at the Alumni Relations and Development office.

So, what makes a successful fundraiser?

"You fundamentally have to believe in what the organisation seeks to achieve, and I think all of us working in the fundraising team here really believe in the power of the University of Auckland, whether through its qualifications or research, to change people's lives."



BRIGHT SPARKS

School children from across Tāmaki
Makaurau were wowed by 'Incredible
Science' recently, at the annual event hosted
by the Faculty of Science.

Around 200 students took part in an array of hands-on experiments, games and displays, including the School of Chemistry's ever popular (and explosive) magic show.

To see more pictures captured on the day by photographer Chris Loufte visit:

auckland.ac.nz/incredible-science-2024



THOUGHT LEADERS TAKE CENTRE STAGE AT APRU EVENT

Sustainability was the key talking point at the recent Association of Pacific Rim Universities (APRU) conference, so the topic of its final panel discussion was fitting: global food security and strategies for building resilient food systems.

The annual presidents' meeting was hosted by the University from 24-26 June and the panel, led by Vice-Chancellor Professor Dawn Freshwater, was the culmination of the event.

The Vice-Chancellor, one of around 130 leading University delegates at the conference, and the Vice-Chair of APRU, emphasised the importance of networks like APRU in driving collective action towards achieving resilient food and water systems across Asia-Pacific.

"We must look at the innovation capacity of the region and connect it to global resources to scale up our solutions effectively," she said.

APRU has established a food-security focused working group, and workshops have been held on such topics as food spoilage and shelf life.

Professor Joy Johnson, President and Vice-Chancellor of Canada's Simon Fraser University, said thinking about food resilience and supply chain disruptions are often framed as the result of geopolitical tensions. "We think about engineering and the science required to solve these problems. But we need to work together with humanists, political scientists and the like who are also part of the solution.

"We must think about policies and practices that can make a difference in terms of food access."

In earlier events, Associate Professor Dan Hikuroa (Faculty of Arts), gave a speech highlighting "runaway climate change, massive diversity loss, and an intolerable social and environmental inequality among people" – the most serious symptoms of the same root problem that must be tackled together.

Travel and events associated with the conference generated 420 tonnes of carbon emissions, which were offset by the APRU contributing to a tree-planting initiative. The Vice-Chancellor said this demonstrated the collaborative, thought-leadership approach of the group of universities.

GOOD TO KNOW

WORK OF UK ARTS ICON ON SHOW

An exhibition at the University's flagship art gallery is highlighting the work of one of the most influential and important figures in British culture.

Derek Jarman: Delphinium Days, now on at the Gus Fisher Gallery, features rarely seen paintings and films by the artist and activist, and is the first exhibition of his work in New Zealand.

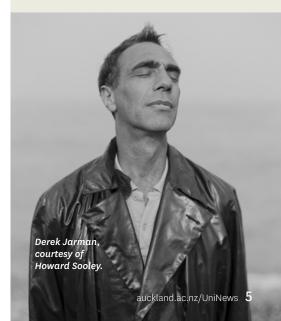
Jarman, an early campaigner for the rights of LGBTQIA+ communities and those living with HIV and AIDS, passed away 30 years ago from an AIDS-related illness at age 52. The free exhibition also features photographs and archival materials related to his work, which sought to challenge the normative culture and neoliberal politics of the time.

Jarman's artistic work spanned film direction, painting, installation, writing, set design and performance, but perhaps his most enduring legacy is the iconic garden he established at his former home in Dungeness in Kent. While he never visited New Zealand, he connects to the country through his father, Lancelot, who was born in Canterbury.

Gus Fisher Gallery is also running a public programme of events and workshops alongside the exhibition, including talks by Professor Gregory Minissale (art history) and Associate Professor Peter Saxton (School of Population Health), who is the University's inaugural Burnett Foundation Aotearoa (formerly NZ AIDS Foundation) research fellow.

Derek Jarman: Delphinium Days continues at the Gus Fisher Gallery, 74 Shortland Street, until 14 September.

More: gusfishergallery.auckland.ac.nz





LISA REYNOLDS: LSD AND THE **HEALING POWER OF NATURE**

Health psychologist Dr Lisa Reynolds is venturing into bold new territory to help alleviate the distress experienced by those facing the 'big questions' of their mortality due to cancer.

Dr Lisa Reynolds is drawing on her deep desire to help the cancer patients she has worked with clinically for almost two decades to explore new therapies harnessing microdosing of psychedelics.

"I would like to support people with the big questions that come up for them and the enormous challenges when they are facing their own mortality," says Lisa, who is a health psychologist and senior lecturer in the School of Psychological Medicine.

"These are not straightforward or easy things to help people with. Perhaps it's partly around my own life stage and my own losses, but it feels like fundamentally important work.

"If you can support people to connect in some way with what's important and purposeful to

them, then that's a real gift, supporting them to live a life that is meaningful to them."

Her initial interest in the psychedelic LSD came from reading Michael Pollan's book How to Change Your Mind, which had a chapter on early research showing the benefit of its use in cancer patients to alleviate feelings of existential distress, isolation, depression and anxiety.

During the course of her own research, she discovered two independent studies from 2016. In one study, patients reported enduring benefits from a psychedelic called psilocybin four or five years later.

Lisa's current microdosing trial offers LSD, or a placebo, alongside meaning-centred psychotherapy that has already proven to be beneficial.

"I would like to support people with the big questions that come up for them."

- Dr Lisa Reynolds, School of Psychological Medicine

It is a feasibility study involving 40 participants with late-stage cancer and, now a third of the way through, some patients are already reporting real benefit from it.

"It is still unclear how LSD works, but some theories suggest it works on neurotransmitter pathways and increases connectivity within the brain," says Lisa.

It also fosters a sense of connection with others at a time when people commonly feel isolated.

Another University of Auckland trial Lisa is currently working on is testing high doses of MDMA, or ecstasy, in people with advanced cancer.

Lisa says her mother's illness and death from breast cancer was a foundational experience for her future career.

"I remember very vividly how unsupported and isolated she was. But also, we, her family, having our own grief and loss, felt very much left to our own devices.

"I remember, at that time, thinking I wanted to become a psychologist. But I knew I wasn't ready," she recalls.

She did other things, including an MBA and work in marketing.

It was when her two children were very young that she decided to return to university to realise her long-held dream.

In 2005, Lisa gained a Master of Science in health psychology with first class honours. It was while working towards that degree, that her young nephew developed a brain tumour and died.

"These two pivotal losses really informed my desire to work in the area of cancer generally, but specifically with people at the end of life."

In 2008, a doctorate followed, researching a mindfulness intervention for cancer patients.

Growing up in Waiuku, her father, a metallurgist for New Zealand Steel, practised transcendental meditation, which could have been an influence, plus, Lisa has had her own meditation practice.

These days, being in nature is her biggest form of meditation, and she and her husband Neil opted to live in Piha to foster that connection to the outdoors.

"The Waitākere Ranges are a special place. There's a spiritual sense that feels quite palpable," she says.

In her spare time, as well as tramping, Lisa has a 'side-hustle' making apothecary-like room sprays, using distilled native botanical bases and essential oils, such as kānuka and mānuka.

"I am trying to create products that are like forest bathing in a bottle. So that if you close your eyes, you can imagine you are immersed in nature."

During our interview, Lisa sprayed 'recovery' in her office, and the fresh floral scents and grounding base notes created a feeling of sitting beside a waterfall. Her idea is that if you are in a situation, like being unwell in hospital, you could use these products and gain the

there's a beautiful feather korowai on the wall, a comfortable leather couch and an artwork that looks like a photographic print of an aurora.

Lisa, along with doctoral student Alesha Wells (Ngāti Awa) and health psychologist, long-time colleague and close friend Eva Morunga (Ngāpuhi, Te Rarawa), are looking forward to writing up the results of the study later next year.

Meanwhile, they are aiming to recruit 50 percent (20) Māori patients into the trial.

Lisa says she has long felt a strong connection with Māori people and culture.

"For me, being Pākehā means living in a

walking up, there were about 20 pīwakawaka who surrounded them and, as they left the treeline, the pīwakawaka continued to fly around them."

When Lisa related the story of these events, which took place only about a year ago, Eva told her that the birds were acting as their korowai.

"The mountain was welcoming them and allowing them to do that."

That sense of awe is something Lisa is exploring in both the LSD study, and one involving virtual reality.

"We are using virtual reality to induce a sense of awe in people, particularly through experiences of New Zealand nature.

"One of the things we know about awe is it can help you shift perspective."

For people going through the challenging experience of cancer treatment, where their focus has become narrower than usual, these are therapies that could help shift their focus, she says.

"When you see something that stops you in your tracks – the first blossom of spring or a full moon that is particularly bright, whatever it might be that gives you goosebumps – for a moment you feel small in the universe and get a sense of being connected to something much larger.

"That seems like an especially useful experience for people who are facing any kind of illness that has an impact on mortality."

Jodi Yeats

"One of the things we know about awe is it can help you shift perspective." - Dr Lisa Reynolds

therapeutic benefits of being in nature.

Lisa sells small batches of her products via Instagram under the brand name MotherTree, which was inspired by a book she loves, called *Finding the Mother Tree*, by Suzanne Simard.

"There are mother trees that have been there for hundreds of years that have created a nursery under their branches and leaves. They send messages to their younger kin and nurture and protect the other trees around them."

Plants and nature are an important feature of the therapy room where she conducts her research at Waipapa Taumata Rau, where place where part of what makes New Zealand special is tangata whenua."

Her friendship with Eva has been long and profound, as evidenced by a story she recounts.

"My grandmother grew up in a settlement called Ruru on the West Coast of the South Island. Over the whole of her life, she looked across Lake Brunner to a mountain called Te Kinga and she always wanted to go to the top," says Lisa.

"But, when she died, my adult children took her ashes to the top to spread them.

"It is a decent mountain and as they were





CELEBRATING THE WORLD'S 'BEST LITTLE BRAIN BANK'

Three decades on, the University's brain bank continues to provide a reservoir of knowledge and yield new research findings.

Distinguished Professor Sir Richard Faull became visibly emotional when he described the 'incredible gift' of a human brain to the University.

Sir Richard was addressing a lecture theatre packed with 240 guests at a panel discussion on 4 July to celebrate 30 years since the beginning of the Neurological Foundation Human Brain Bank - aka the 'best little brain bank in the world'.

"Those families have put their faith in us to be the custodians of the brains of their partners, their aunts, their uncles, their fathers, their mothers after death," he said.

"It's the most precious gift you can give to research. You couldn't pay for it - it's a priceless treasure.

"When we get a brain, the family comes with it... We go back to the family to get more information, talk to the doctors to get the person's clinical history. And we are starting to put together the three pillars of research: community - family, whānau - in the centre; clinicians and hospital doctors; and the researchers. All those groups work together in brain research "

When Sir Richard received the first brain in 1981, he could never have guessed that the donations would continue to trickle in from families who were hoping researchers would find out what was going on in the diseased cells of those donated brains and use those findings to offer their children a better future.

In 1993, Richard went cap in hand to the Neurological Foundation and in 1994 the foundation funded the Human Brain Bank, which later became an integral part of the University's Centre for Brain Research (CBR).

The panel's MC, journalist Mark Crysell, asked how CBR's relationship with Māori had evolved.

Sir Richard said he has whakapapa to England and, on his grandmother's side, to Te Āti Awa, Ngāti Rāhiri in Taranaki.

Building relationships with iwi has meant travelling to marae, where Māori feel comfortable, to talk about brain research, the latest findings and treatments, as well as establishing tikanga

Sir Richard expressed his surprise and delight that the brain bank now employs five people and contains more than 40,000 blocks of brain tissue, all carefully catalogued, from more than 1.000 brains.

As part of succession planning, Professor Maurice Curtis has been appointed co-director "to ensure the brain bank goes on forever", Sir Richard said.

Maurice told the audience he started his career as a radiographer with a dream of becoming a professional cyclist, but a pivotal experience changed all that.

While working as a radiographer, Maurice

"It's the most precious gift you can give to research. You couldn't pay for it - it's a priceless treasure."

- Distinguished Professor Sir Richard Faull

protocols for receiving brains. Kaumātua and kuia recite karakia and lift the tapu from donated brains, making them whakanoa (removed of tapu) for research.

The researchers' visits to marae and strong connections with Māori have extended to establishing a satellite research clinic in Kaitaia led by dementia researcher Dr Makarena Dudley (Te Rarawa, Ngāti Kahu) - to look after people with mate wareware, or dementia, in collaboration with Ngāpuhi health providers (see story, page 9).

visited a rest home and saw a man in his late 30s or early 40s surrounded by people of a totally different age group. He got talking to a nurse and learnt the man had Parkinson's.

It made the young Maurice think about the power and potential of research.

"If you could discover a drug or a treatment, you could potentially affect the lives of thousands or hundreds of thousands or even millions of people with Parkinson's or another genetic brain disease."

He met with Sir Richard and went on to become a CBR scientist.

Maurice described the exacting process of receiving a brain, where urgency is required after a person dies to ensure the tissue is viable for research purposes. The gold standard is two to 12 hours after death.

The brain bank gets requests from researchers all over the world, because of the quality of its tissue.

Dr Helen Murray, a CBR research fellow in anatomy and medical imaging, introduced herself, revealing she is also a representative ice hockey player and formerly captained the Ice Fernz for five years.

It was relevant experience, as she talked about the fact chronic traumatic encephalopathy - or CTE, a brain disorder likely caused by repeated head injuries - can only be diagnosed post-mortem and brain donors and their families are desperate for answers.

"We have only known about the disease for the past ten to 15 years. So we are looking at the brains of people who have had head injuries and asking how their brain is different from others, and how can we develop a test for it."

Helen said she does worry about head injuries herself as a sportsperson, but acknowledged sport has come a long way in recent years to take steps to prevent brain injuries.

Finally, the granddaughter of artist Pat Hanly, Lillian Hanly, spoke about the many questions and soul-wrenching choices facing people whose forebears have died of a genetic brain disease - in Pat's case, Huntington's.

Lillian made a documentary, called Fifty Percent, about the decision of whether to get a genetic test to find out, as a young woman, whether she carries the gene that means she will develop the disease.

While she has not yet taken the test, many questions weigh on her and her family's minds, chiefly whether there will be a cure.

The panel spoke about past medical breakthroughs and the constant discovery of new therapies. Recent breakthroughs in genetic therapies could prove useful with Huntington's.

In question time, Bob Narev, ex-chair of the Hugh Green Foundation, asked a salient question: "Of the brains that you've been able to gather and that you're working on, do any of them outlive their usefulness, or are they so preserved that they continue to provide material?"

Sir Richard explained that, as science changes, the brain tissues can yield new findings.

"Questions continue to come up and now, as Maurice has alluded to, we're doing full genome scans, so suddenly that tissue becomes incredibly valuable.

"There's other tissue - we have about eight freezers - [but] we have restricted resources and so we have to sometimes rationalise that collection. We do it in the best possible way.

"But we've got tissue which has been there from the very early days of the bank. It's like having money in the bank; we can use that tissue in research, and we have a reservoir of knowledge."

MC Mark Crysell wound up the event by acknowledging the other members of the team, donors, philanthropists and notably the Neurological Foundation.

And one final comment from Sir Richard undoubtedly resonated strongly with the audience. He talked about the importance of going back to communities and talking about advances in dementia care, which helps give people hope and supports them to continue with the most important work of all.

"We may not have a cure, but we know, for people with dementia, that care and support - love - is one of the magic bullets for fighting anything," he said. "And never underestimate how important that is."

Jodi Yeats





MARAE-BASED CLINIC EXTENDED

The groundbreaking marae-based mate wareware, dementia-care research clinic established in Kaitaia six months ago has been hailed a success and has now been extended indefinitely.

CBR partnered with Northland iwi Ngāpuhi and Te Rarawa, and kaupapa Māori-led health organisation Te Hau Ora o Ngāpuhi to pilot the clinic, which aims to assist kaiāwhina, or carers, of people with mate wareware.

Sir Richard announced the project's extension at an 11 July event, stating the marae-based research clinic isn't "a textbook approach - it's revolutionary"

Dr Makarena Dudley said the aim was to develop a culturally resonant model for kajāwhina.

"Our goal was to create an environment that reflects whanau needs and allows them to guide us, rather than the other way around."

Data show carers for whānau with mate wareware frequently die before the person they are caring for.

CBR returned to Roma Marae in Ahipara to extend the partnership after hearing powerful testimonies from whānau navigating mate wareware. Some families are dealing with multiple cases simultaneously, making this support even more critical

Whānau reported it is essential to protect the mana of whanau, something the mainstream health system does not understand. The current diagnostic tools, often seen as interrogative and anxiety inducing, have had negative effects on whānau, they said.

Makarena has also developed the MANA tool (standing for Māori Assessment of Neuropsychological Abilities) for diagnosing kaumātua with mate wareware.

It incorporates elements of te ao Māori such as wairua, checking the person's spiritual well-being. Many people also said the mana and removes the stigma of dementia, opening a positive dialogue about support.

Sir Richard Faull said he hopes to create more marae-based clinics across Aotearoa.

"It's time we grow and embrace this idea of marae-based clinics for the future."

■ Te Rina Triponel

Full story: auckland.ac.nz/cbr-kaitaia



FINDING VOICE

First People's perspectives, largely left out of traditional music curricula, are foregrounded in a new book.

As a young man training as an opera singer in the conservatory tradition, Dr Te Oti Rakena learned all about lives of the great Western composers.

But one example of what he wasn't taught, was that the music practices of the Indigenous Sami people of northern Europe were once deemed 'witchcraft' and suppressed, and that Sami have subsequently struggled to reclaim those practices.

"I only learnt about this recently, but it was profound for me," says Te Oti (Ngāpuhi, Ngati Ruanui, Kāi Tahu), an associate professor in the School of Music, "because it parallels stories of Indigenous people in Canada, of Indigenous people in Australia, and of course Māori."

The Sami story is among the contributions to a new textbook Te Oti has edited, which foregrounds Indigenous experiences and



The book's cover artwork was created by Elam student Kato'one Koloamatangi. Te Oti says its theme, expressing the artist's frustration at people not correctly pronouncing her name, resonates with ideas in the book.

research in music teaching. Decolonising and Indigenising Music Education: First Peoples Leading Research and Practice, produced with the International Society of Music Educators (ISME), is a first in field, he says, in its telling of stories largely left out of current music curricula.

"They're stories that we've never heard, and that we should know. I know the dates associated with Haydn, with Beethoven, their histories and their struggles in Western Europe very well, but I knew none of this.

"These stories are not really known outside their communities, because why would you share them if you didn't trust that they're going to be reported well?

"That's the space we've created with this book; we are allowing the people of the community to report them."

A vocal performer, researcher and awardwinning educator, Te Oti, like many of his students, began singing in his community. In his case, as the son of a prominent Methodist minister, in church.

He went on to study at the New England Conservatory in Boston and completed a doctorate in vocal studies at the University of Texas at Austin, where he began his vocal teaching career.

"I'm an opera singer by training for sure, but I'm most interested in helping people find their singing voice, particularly the undergraduate classical voice.

"That has a lot of connections with community music, because that's where most singers find their love of singing: community choirs, musical theatre groups and, of course, kapa haka. And for many of our Pacific students, it's through church, which is what I came through."

It was via his experience preparing singers for the rigours of competing at Te Matatini that

"They're stories that we've never heard, and that we should know."

– Dr Te Oti Rakena

Te Oti first joined the community music-focused research group of ISME, the global body of music educators. That was in 2005, and he was the first Indigenous academic to do so.

"What I noticed in the community music area, as the only Indigenous person, was that there was data being reported, but quite often that wasn't being done by a representative of that community."

Te Oti ultimately became a driving force in the formation of ISME's Decolonising and Indigenising Music Education global steering group, which has subsequently produced the book. The title was recently launched in Finland, at ISME's biennial conference.

"Many Māori and Pacific peoples working in this area get these opportunities, and we look at them and we don't have the time, but it's not about us, it's about uplifting our communities, so we make the time."

More widely, Te Oti's teaching and research career has been characterised by his efforts to improve the quality of education for Māori and Pacific students.

His teaching in the School of Music's voice programme involves creating a learning community around the studio, transforming it from a physical space to a relational one. This creates the ability for not only the teacher, but also students and their families, to have a voice, and support each other as a cohort.

In 2021 his teaching innovations, which also include incorporating scholarship from Māori academics and uplifting different communities' music practices, helped him win a Tertiary Teaching Excellence Award.

While Te Oti has trained opera superstars like Moses Mackay and Manase Latu, the demands of a high-profile operatic singing career aren't for everyone, he says. But there are many paths a gifted singer can take; he's had students pursue successful, fulfilling careers, for example, in opera directing and musical theatre, as choral directors, community music facilitators, teachers, and voice-science and vocal-health researchers.

"What my teaching has allowed me to do is guide and mentor people into areas that they really love and that are still connected to voice. So I'm really giving them options and helping them find spaces where they will be successful," he says.

"I love seeing that trajectory."

■ Caitlin Sykes

COASTAL CANNIBALS

Dr Ngahuia Harrison, a lensbased researcher and artist, has received a 2024 Vice Chancellor's Best Thesis Award for her compelling work on Whangārei Harbour and the heavy industry that lines its shores.

'Ahakoa e tū ana ahau ki uta, e taupungā ana ki tai.'

This Ngātiwai whakatauakī, or proverb, which translates as 'although I am standing on land, I am submerged in the tide', strikes at the heart of the research of Ngahuia Harrison (Ngātiwai, Ngāti Pukenga, Ngāpuhi).

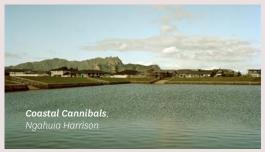
Her PhD research, titled 'Coastal Cannibals: Industry Occupation on Whangarei Te Rerenga Parāoa', examines the intersection of economic development and its impact on mana whenua. The creative-led research includes photography, video, textiles and sculpture as well as a written dissertation.

Ngahuia completed her award-winning PhD in 2022 at Elam School of Fine Arts and the James Henare Research Centre, supervised by Associate Professor Peter Robinson and Associate Professor Marama Muru-Lanning, and credits her success to working across the departments.

"The interest in trans-disciplinary or collaborative research is growing," she says. "As well as being more expansive in what an output can be, especially if we're thinking about accessibility, with creative-led and Indigenous research methods, these modes of working are inherent.'

'Coastal Cannibals' explores the consequences of industrialisation through a mana whenua lens on Whangārei Harbour, also known as Te Rerenga Parãoa - a place once revered as a gathering spot for chiefs and whales.







Ngahuia brings to light the political and cultural complexities of Whangārei Harbour, illustrating the lasting effects of colonisation, government legislation, and private development on the land, water and people.

The oil refinery, cement works and residential developments depicted in her images have led to extensive ecological damage to the harbour.

However, these industries have also provided economic security for the region, serving as major sources of employment.

Ngahuia says the promises of economic sustainability made during industrial development came at the expense of mana whenua and the rich marine life that once thrived in the harbour. It is a complicated relationship that raises questions to which the thesis offers no easy answers.

"These are the places where mana whenua worked; that have sustained whanau because the customary practices no longer sustain anyone. That is the consequence of a cannibal capitalism, which impedes our ability to subsist or access natural resources, if they haven't been extinguished altogether."

These ideas are evident in Ngahuia's photography, which articulates the intricate interplay of place, Indigeneity and contemporary lived reality that unfolds across Whangarei Harbour and its surroundings.

"I wanted to portray the flax-roots reality of living around industrial sites, of working in these places, in a landscape where your history extends over a thousand years - a place where you would've fed yourself by collecting kaimoana, but that resource is fast becoming extinct, and, more recently, where places like the oil refinery have sustained whanau during the 'Think Big' expansion," she says.

"I wanted to complicate ideas like 'customary practice', or these boxes Māori are placed into, in order to prove our relationship to place. Crown definitions are often very narrow, which is not representative of real life."

Although the sites covered in her research are both geographically and culturally specific, they represent processes that affect many Māori across Aotearoa, she says.

Ngahuia now holds Te Tomokanga Postdoctoral Fellowship, a two-year appointment with Te Kura Tangata, Faculty of Arts. The role recognises the importance of Māori and Pacific knowledge and experience, and the need for more Māori and Pacific staff.

■ Te Rina Triponel

BECOMING TREATY PEOPLE

A new book by Honorary Associate Professor of Sociology Avril Bell explores the experiences and insights of people who work with, and for, Māori communities, guided by their commitments to te Tiriti o Waitangi.

Becoming Tangata Tiriti launches on 8 August and is born out of Avril's interest in how Pākehā/ tauiwi have responded to the changing position of Māori, particularly in the world of work.

She hopes it can be a resource for people who need to engage with the Treaty and te ao Māori for their work, but are unsure where to start.

"The bulk of the book explores the kind of work these tangata Tiriti do, their strategies for working in ways that support Māori aspirations, and for being useful without dominating."



Becoming Tangata Tiriti: **Working with** Māori, Honouring the Treaty, by Avril Bell, is published by **Auckland University** Press, \$30

MY SPACE

WRITTEN IN THE STARS

Professor Jan Eldridge grew up in the UK reading classic sci-fi, watching *Doctor* Who and zooming around in *Star Wars* spacecraft in computer games.

A career spent among the stars, it seems, was destined.

"It all comes together in this perfect storm to explain why I do the science I do," explains the University's head of physics – a theoretical astrophysicist whose research has focused on the lives and deaths of stars.

A lifelong love of sci-fi is also reflected in her office, which is home to an impressive collection of *Star Wars* Lego models and *Doctor Who* paperbacks.

In the first of a regular series exploring some of the special spaces around the University, Jan talks to *UniNews* about her unique office.

Your love of sci-fi is clear from your office. Where does it stem from?

I was born in 1977 when the original *Star Wars* was released and the *Voyager* spacecraft was launched. Growing up, *Doctor Who* was on TV and my Doctor Who – the one I really remember – is Sylvester McCoy.

Funny story, when I was promoted to professor, my students organised a video message of congratulations from the real Sylvester McCoy. That's when your students know you're a science-fiction fan!

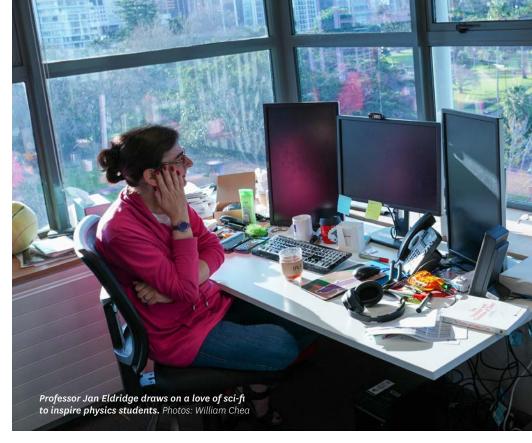
But I wasn't just into movies and TV series; I've been using computers since I was about five, which is why I'm a computational physicist. I was always playing computer games, and my favourites are where you get to fly different *Star Wars* spaceships and have adventures.

My dad also had books by the classic 1950s and 60s science-fiction authors. Now I read a much broader range of science-fiction, but my favourite novel is still *The Songs of Distant Earth* by Arthur C. Clarke.

Why have you brought this passion into your workspace?

Because I can use it for my teaching. When people are taking introductory courses, they've often seen something about space on TV, and they want to learn about it. So, if I say, 'how realistic is the spaceflight we see in *Star Wars*?', it's a good thing to use for learning.

When I teach second-year physics, I include examples of things from old science-fiction novels, like a spaceship that's a cylinder, and if that cylinder rotates, it's got gravity inside. So







you can make the students work out how fast it has to rotate, and what the gravity would be.

They probably hate it, but it's trying to make it at least a bit more interesting!

Where are all the Lego models from - and which is your favourite?

There's a space shuttle that was a gift from one of my friends in the UK when I turned 40, but all the others are from my wife.

The Millennium Falcon is probably my favourite. That was my Christmas present in 2011, the year I arrived in New Zealand, when my wife didn't know what else to get me. I brought it into the country in this heavy suitcase and built it here, so it's been here as long as I have.

But the other factor is that, apart from the Lambda shuttle, all the other models are craft I've flown in computer games. And when it comes to which of these I most prefer to fly, the answer is always the X-wing.

Where are the Doctor Who novels from?

These ones came from Simon Thrush, of the Institute of Marine Science – he passed them on to me – but I need to bring in more of my books

from home to make a more complete collection.

I've written a chapter in a book looking at the science behind *Doctor Who*, and in it I looked not so much at the science that appears in *Doctor Who*, but how *Doctor Who* has had an impact on science.

I went through every single episode and worked out what type of planet they went to and, interestingly, they go to Earth more than any other planet. And the reason is you want the audience to see themselves at home rather than off on some planet they may not care about.

There's also an interesting difference since the series reboot, because we know that there are planets around other stars and we didn't know this during the old series.

What reaction do you get from students when they see these things in your office?

Well, some people have complained about the models being dusty! But they're always a talking point. You want to break down barriers; for people to know you, and to see these things helps people reach out. You can see someone is a human, and that they like to play.

■ Caitlin Sykes