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New director of Auckland Bioengineering Institute looks to the future Page 8

SPRING GRADUATION

Students' success stories at the heart of what we're all about

WHAT A BUILDING

Refurbishment of old Social Sciences building unveiled

CHIPPING IN TO HELP THE NEEDY

Old chip packets being made into blankets. What else is being done?

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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.



RACISM DRIVING OUTBREAK

A surge in rheumatic fever cases is inequitably affecting Māori and Pacific tamariki, Dr Anneka Anderson of Te Kupenga Hauora Māori told *Waatea*

News. "We have a health system that still privileges non-Māori and non-Pasifika," Anneka said. "There has to be more investment in good quality housing and equitable incomes if we really want to eliminate it."

Link: tinyurl.com/anderson-waatea-health



WORKING MIGRANTS FEEL TRAPPED

Research by Professor Francis Collins (Sociology, Arts) with Associate Professor Christina Stringer (Business) was picked up by *Stuff* and bFM.

It looked at migrant worker exploitation in Aotearoa, and found it was made worse by the need for many migrants to remain with a particular employer as a condition of their visa. Links: tinyurl.com/migrant-research-stuff and tinyurl.com/migrants-bfm-collins



DISCOVER POLITICAL LEANINGS

Associate Professor Jennifer Lees-Marshment talked to TVNZ's *One News* about the Vote Compass tool with which she has been involved. The tool asks voters to answer a questionnaire and then reveals how their answers align with political parties' policies. "It's much easier to do Vote Compass than to read all the policy manifestos," Jennifer said.

Link: tinyurl.com/marshment-vote-compass



EMBRYO GROWN IN LAB

Professor Andrew Shelling (Faculty of Medical and Health Sciences) told Newshub that a model human

embryo grown in Israel using stem cells was "an enormous achievement". Without using sperm, eggs or a womb, scientists created the equivalent of a day-14 embryo in the lab. The field is ethically fraught, according to Andrew. "What is this? Is this a human or just a group of cells? What are the implications for future use of these cells?"

Link: tinyurl.com/shelling-newshub-embryo



CHATEAU'S UNCERTAIN FUTURE

With the iconic Chateau Tongariro closing this year due to its serious vulnerability to earthquakes, Professor Jason Ingham (Faculty

of Engineering) told the *NZ Herald* that the remediation cost could top \$100m. Jason said that, in his opinion, the hotel is such a special building that any government will need to bring it back to full use and capacity.

Link: tinyurl.com/ingham-herald-chateau



DOWN TO TECHNICALITIES Simon Schofield (Faculty of Law) spoke to RNZ's

Morning Report about the repercussions of charges being dismissed against two people accused of health and safety failings in the Whakaari White Island trial. The operators didn't have any workers on the island, so the judge ruled it couldn't be considered a workplace, therefore the pair shouldn't be liable. Simon said: "That is a technical legal point ... the difficulty is, we've had almost three months of trial to get to this point." **Link: tinyurl.com/schofield-rnz-whakaari**

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Editor: Denise Montgomery denise.montgomery@auckland.ac.nz Photography: Chris Loufte, William Chea, Dean Carruthers Design: Megan Ebsworth Production: University of Auckland Volume 53 - Issue 8 - October 2023 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 November 2023, copy due 13 October. 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.

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SHOWCASE BUILDING 201 UNVEILED

The University has transformed the learning environment for the faculties of Education and Social Work (EDSW), Arts, and Creative Arts and Industries (CAI).

The 50-year-old former Social Sciences Building (B201) on Symonds Street has been refurbished in a sustainable, adaptive reuse project and was officially opened on 19 September. The design was described as 'world-leading' by the New Zealand Green Building Council. Comprehensive planning and three years of intense construction, assisted by shovel-ready funding from the government in 2020, led to the grand opening by Prime Minister the Rt Hon Chris Hipkins and Vice-Chancellor Professor Dawn Freshwater, with Ngāti Whātua Ōrākei, University staff and community, and those at the coalface of the refurbishment in attendance. The Vice-Chancellor said the finished building, providing state-of-the-art teaching, learning, research and administration space for the three faculties, exceeded expectations.

"This is a stunning purpose-renovated and sustainable building to welcome the Faculty of Education and Social Work to the centre of Waipapa Taumata Rau and to better connect the University precinct."

The refurbishment has been completed in preparation for the arrival of EDSW moving from the University's Epsom campus in time for the 2024 academic year. The nine-storey building includes a soaring glass atrium, capped by a vaulted timber roof and solar photovoltaic panels.

Among many other notable features, B201 includes dance and drama studios, a flexible lecture theatre (try not to be distracted by the views), archaeology labs and, with teacher education in mind, specialist areas for cooking, timber work, craft, painting and music.

As well as EDSW, B201 will host the School of Social Sciences in the Faculty of Arts. Professor Robert Greenberg, Dean of Arts, said, "It is wonderful that the University has made a commitment to our disciplines with these amazing new spaces that in themselves will bring new vitality to our respective faculties."

The building features staff and postgraduate research offices opening onto attractive shared spaces with impressive views across the city, and green roofs with native plants.

B201 was designed by Jasmax, in collaboration with Māori design agency Haumi, engineered by Beca and built by Hawkins. The building cut its carbon emissions in half by reusing and



Clockwise from top: The impressive atrium; Vice-Chancellor Professor Dawn Freshwater unveils the plaque with PM Chris Hipkins and Chief Property Officer Simon Neale; Andrew Eagles, CEO of the NZ Green Building Council, with Simon Neale; Professor Selina Tusitala Marsh dedicated a poem to B201; University Kaiarataki Michael Steedman; Dean of CAI Professor Nuala Gregory, the Vice-Chancellor, Dean of Arts Professor Robert Greenberg and Dean of Education and Social Work Professor Mark Barrow. Photos: Dean Carruthers

strengthening the existing structure rather than starting from scratch. Simon Neale, Waipapa Taumata Rau Chief Property Officer, says a 6 Green Star certification was a priority from the outset. "This project highlights how we can avoid knocking down our existing spaces and instead adaptively re-use them, slashing our carbon emissions while creating a space fit for the future. This is a truly world-leading innovative building."

He said by reusing the existing concrete frame, there was a major saving in embodied carbon and significant reduction in construction time.

Another important part of the brief was to create a link between Symonds and Wynyard streets. A new feature staircase and lifts drop down onto Wynyard and a new entry there which, together with the planned landscaping, will transform the area and pull it into the campus.

The new connection also traces a historic one; the area called Waipapa that once sat adjacent to the foreshore below the University and was an important point of trade for Ngāti Whātua and the fledging city of Auckland.

Jasmax project lead and senior architect Chris Scott said: "We wanted to incorporate that story into the façade and the atrium roof with the tukutuku language, so the exchange of produce has now become an exchange of knowledge. You can follow this horizontal zigzagging pattern, called Aramoana, onto Wynyard Street to recreate that journey."

The move into the new building will be staggered over a few months, with most expected to be in place by Semester One 2024.

There are other exciting buildings set to impress including the refurbishment of the historic Old Choral Hall and the University's new Recreation and Wellness Centre, scheduled to open in 2024.

Dean of EDSW, Professor Mark Barrow, said colleagues were looking forward to being part of the City Campus. "Education faculties are almost always on the periphery of a university. But at Waipapa Taumata Rau, we'll be very much part and parcel of the heart of the University.

"We're just a stone's throw from the ClockTower and across the road from the new Recreation Centre. This is very exciting for our faculty, particularly our students."

Full story with video at: auckland.ac.nz/refurbished-b201-unveiled

GOOD TO KNOW

SCIENCE CENTRAL FOR POLITICS

With the election imminent, the University welcomed the key politicians to debate the future for research, science and innovation.

Politicians gave their views on topics ranging from GM technology to taking the politics out of research at Shaping Tomorrow Today, an election debate hosted by the University at the Faculty of Science.

Will Charles (UniServices) posed the questions and moderated a lively debate on the role of research, science and innovation in a society seeking to shift towards a just transition to a sustainable future.

Lifting the restraints on the use of GM technology? A resounding yes from the Hon Judith Collins (National) and Dr Parmeet Parmar (ACT). A no thanks from the Greens' Dr Lawrence Xu-Nan, while the Hon Dr Ayesha Verrall (Labour) said this would explored through Te Ara Paerangi Future Pathways programme, focusing on the future of the research, science and innovation system.

Mātauranga Māori? Dr Parmar said it was important to focus on 'real science'. Collins said it was not necessary to denigrate the notion of science and lamented that science had become 'heavily politicised'. Verrall strongly disagreed with Parmar's statement. She said there were opportunities in the research system to explore



From left: Moderator Will Charles, Deputy Dean Science, Associate Professor J R Rowland, Dr Parmeet Parmar, Hon Dr Ayesha Verrall, Hon Judith Collins, Dr Lawrence Xu-Nan, Business Kaiārahi Hone Thorpe and Science Kaiārahi Teariki Tuiono. Photo: Chris Loufte

and research alternative knowledge systems to add to our understanding of the world.

Dr Xu-Nan said Mātauranga Māori was unique to Aotearoa and offered a framework to integrate science to protect the environment.

Verrall, Minister of Health, and of Research, Science and Innovation for the government, said a strong research sector enabled New Zealand and the world to "... face a slew of wicked problems, from tackling climate change, to keeping our population healthy to growing economic productivity".

Collins, National's Science, Innovation and Technology spokesperson, said science was the driver for health and well-being, and industry. She promised to 'depoliticise science' and work on cross-party accords to build certainty and focus for the sector.

ELECTION PARAPHERNALIA

Don't bin that brochure. University librarians want to expand their 112-year-old collection of election ephemera.

The library is gearing up for the 14 October election by launching a campaign for donations of political ephemera. Thousands of political leaflets put into household mailboxes over the past 112 years are housed in a Special Collections election archive that also contains car bumper stickers, posters, lapel badges – even a lollipop and a condom.

With more than 5,000 individual items, the collection is one of the biggest of its kind in the country, an invaluable resource for historians and researchers exploring Aotearoa New Zealand's culture and politics.

"Your mailbox will fill up with publicity materials from political parties over the coming weeks," says Cultural Collections assistant Ian Brailsford.

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"You might be tempted to put them in your

paper recycling bin, but Special Collections wants you to put them to one side and bring them in."

A collecting box is on the Special Collections counter on the ground floor of the General Library or University staff can send items through the internal mail.

A Labour-red lollipop and a "Be safe with Labour" condom were part of a student pack distributed on campus by the Princes Street branch of the party for the 2002 election.

Capturing social and cultural changes, the collection includes Labour and National Party pamphlets from the 1940s and 1950s showing Pākehā nuclear families with pipe-smoking, authority-figure dads and attentive mums.

As late as 1960, National Party publicity showed a thoughtful man pondering the issues as a woman on a swing kicked out her legs; "Join the swing to National!"

University of Auckland connections abound, with two historians, Keith Sinclair and Michael Bassett, standing for Parliament in 1969, while Helen Clark, an assistant lecturer in politics, ran in 1975.

The oldest general election item relates to

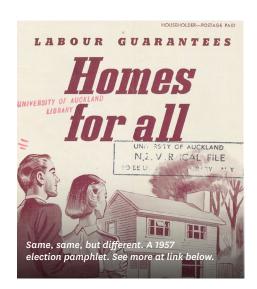
Parmar said science should be driven by scientists. "It should be free of unnecessary political interference and bureaucratic obstacles to maintain integrity and public trust."

Xu-Nan offered a future Aotearoa that had reached net zero for carbon emissions well before the 2050 deadline. He wanted a research landscape where scientists and academics did not have to worry about job security and funding.

The Deputy Dean of Science, Associate Professor JR Rowland introduced the debate, noting that Tāmaki Makaurau was the global front door to the country.

"When it comes to scale, scope and impact, we are Aotearoa New Zealand's research and innovation city."

Full story and photo gallery: auckland.ac.nz/election-research-debate



George Fowlds standing in 1911 for the Liberals in Grey Lynn. He became president of the Auckland University College, later renamed as the University of Auckland.

 Paul Pankhurst
 See a photo gallery at auckland.ac.nz/election-bits-for-library
 Send items to: Election ephemera,
 Special Collections, General Library

INAUGURAL **PŪTAIAO** SYMPOSIUM



The Faculty of Science recently held its first biennial Pūtaiao Symposium to strengthen pathways for Māori in science.

The two-day event aimed to ignite a flame for Māori success in science (pūtaiao), technology, engineering, arts, medicine, maths and mātauranga Māori. Children from local schools played a big part in the event at Te Papa Ako o Tai Tonga Campus, the South Auckland Campus.

"Our tamariki are the 'why' of the event, the scientists of the future," said Faculty of Science Kaiārahi, Teariki Tuiono. The theme was Ma Mua Kaa Hua, which was about exploring the past to inform the future.

Wikuki Kingi, the Kaiārahi for Creative Arts and Industries, had the children entranced when he talked to them about the Pou Kapua at the nearby Due Drop Centre in Manukau.

"The kids loved the science that the pou represents," says Wikuki. "It's an ancient time machine capturing the histories of our collective journeys to Aotearoa New Zealand." **Full story:**

auckland.ac.nz/tai-tonga-science-event

BLOWING THE KITE JUDGES AWAY

Student engineers have been put to the test in the Newmarket Campus wind tunnel.

In September, the Mechanical and Mechatronics Student Association (MECHA) club held its second annual Beca Design and Build Competition at the Campus's aerodynamics lab, home to the largest wind tunnel in New Zealand. The one-day contest pitted eight teams of four student engineers against each other to see who could design and build a kite using supplied materials, in a short time. Teams competed for a share of the \$500 prize pool.

The event was organised and run by MECHA executive member Tiger Fong-Fitzpatrick, a second-year mechatronics engineering student.

"This was the first time we've held it in the wind tunnel. The teams of four were given a brief and over the day they built and designed their kites, testing and retesting in the wind tunnel."

Students made adaptations and then it was crunch time – testing them in the wind tunnel in front of industry judges, including two from engineering firm Beca, who scored their efforts.

MECHA had provided a fictional scenario in

The students built kites to send a distress sign

which the aim was to design a kite to send a distress signal to Beca. The scenario was that teams would be travelling to a Beca event but find themselves stranded on a desert island.

Flying high at the end of the day were winning team 'Water Bottle' (Ruby Chen, Jade Nguyen, Jongyang Zhao and Louis Lee) with a design that withstood every wind-speed scenario. The judges were impressed with the kite's resilience, lifting smoothly against wind even at the max speed.

Dr Ahmad Zaki, a mechanical engineering alumnus who is now the aerodynamics lab's senior technician, oversaw its use.

"The tunnel has a 2.5m by 3.6m cross section and is 20m long. It's a closed-loop tunnel so it loops the wind inside. It's designed to investigate how wind influences structures, buildings and even ventilation. We use it for other research too, such as wings and aerofoils.

"We've also started flying drones inside the tunnel to see how wind affects them."

William Chea

STUNNING NEW POU ON CAMPUS

Ngāti Whātua Ōrākei and Waipapa Taumata Rau unveiled a pou at the University's City Campus in September, honouring past, present and future rangatira.

Designed and carved by a team led by Ngāti Whātua Ōrākei master carver, Arekatera 'Katz' Maihi at Toitū Design, the pou is called He Taumata Rau.

"It is very appropriate that 'He Taumata Rau' was chosen as it speaks to the tūpuna of old and allows us to look at the people of this time, and place them amongst those great names and stories," Katz says.

"He Taumata Rau also speaks to the many mountain peaks within Tāmaki, reflecting the many challenges we face and also the many successes we achieve in our lives."

The pou sits on the corner of Symonds Street and Grafton Road. It was unveiled in a dawn ceremony attended by Ngāti Whātua Ōrākei, Vice-Chancellor Professor Dawn Freshwater and the office of the Pro Vice-Chancellor Māori.

Already many graduates have been seen using it as the impressive backdrop to their photos.

- Te Rina Triponel
- Full story:

auckland.ac.nz/new-engineering-pou

The new pou near the Engineering building is called He Taumata Rau and was carved by 'Katz' Maihi. Photo: Chris Loufte

UNIVERSITY OF AUCKLAND

GRADUATION

RACHEL CARA: DUAL MASTERY

Rachel Cara enrolled in a Master of Business Administration (MBA) partly because she wanted to feel uncomfortable.

The spring graduate, who is Auckland Transport's real-time and response manager, has led operational teams for the past 15 years. But despite her often high-paced and varied career path, she wanted to step out of her comfort zone and expose herself to new knowledge and business insights.

"It was about making myself feel uncomfortable and putting myself in a position of learning new information," says Rachel, whose career began as a dietitian.

The first-time mother, who also has a Bachelor of Science in Human Nutrition and a Postgraduate Diploma in Dietetics, started as a clinical dietitian at Middlemore Hospital before working for a contract catering company.

Rachel eventually became a regional manager looking after patient meals for six of the North Island's district health boards. She had an operational team of about 650 frontline staff and, from a nutrition standpoint, it was a complex environment that saw the delivery of close to 10,000 meals a day,



After three years, she was ready for a change and took a job at Auckland Transport (AT).

"It's not perhaps where you would expect to see a dietitian ending up, but throughout my career, I found that what drives me is working with people, leading people and being able to see the fruits of my work," she says. "Now I have a frontline team, and we can see the impact of the improvements and enhancements that we make for customers every day. That's rewarding."

Rachel, who has been with AT for around five years, says the MBA has helped her understand certain aspects of the large organisation on a deeper level.

"We're a complex organisation because of the broad spectrum of services."

Rachel's baby, Asher, arrived when she had around two months of her studies left.

"I prayed that I would have a baby that slept," she says.

"Thankfully, I did, and he was a dream baby during those first few months. He would often sleep in my front pack while I worked or studied at my standing desk."

Sophie Boladeras

Full story: auckland.ac.nz/grad-MBA-rachel-cara

CHASING A DREAM, NOW REALITY

Four years ago, Viloshini Baskaran left Malaysia with her husband and two young sons to start a PhD at the University of Auckland, determined to chase her dream of adventure and study in a new country.

She persevered through the country's Covid-19 lockdowns and has just graduated with a PhD in Education at the spring ceremony.

Her mum is now waiting in Kuala Lumpur to welcome Viloshini for a long-awaited holiday in October when she will bring a "beautiful scroll to put on the wall", Viloshini says.

"It was from mum that I learned about the importance of education. I also had great teachers at school and university and, from them, learnt to be a passionate teacher."

Viloshini's undergraduate and masters degrees overseas were in teaching English to speakers of other languages (TESOL). When she decided to do her doctorate overseas, her background as a teacher was valuable to her doctoral research. Her PhD focuses on the importance for children with long-term conditions - like cancer, asthma

and cardiovascular disease - of remaining socially connected with their school.

"Because they have high healthcare needs, these children are often absent from school for long periods," she says. "While they might be included up to a point for their learning, my research discovered gaps and confirmed how important it was to keep them in sight as well as mind, to foster that sense of inclusion."

She knows from personal experience how difficult learning can be when you can't meet with your teachers face to face. "I persevered to juggle work, studies and motherhood, as well as managing the numerous challenges brought about by the Covid lockdown. Isolation and loneliness can be tough on anyone."

Viloshini says her family has adapted to their new home well. "I'm so glad we made that decision to be brave and travel ... it's allowed us to learn and grow in many ways."

Julianne Evans Full story: auckland.ac.nz/grad-edsw-baskaran



achieves her doctorate. Photo: Craig Berry

CARVING A CRUCIAL PATH

While many people shy away from working with numbers, spring graduate Paraone Luiten-Apirana isn't that person.

Paraone (Ngāti Hikairo, Ngāi Tūhoe, Te Arawa) has graduated with a conjoint Bachelor of Commerce and Bachelor of Engineering (Hons) in Mechanical Engineering.

"I was intrigued by working with numbers most of my life. The idea of doing something hard, like undertaking an engineering degree, gave me a new challenge," he says. "As for commerce, I saw it as an avenue to connect with fellow Māori tauira, another way to boost my career options."

He is committed to creating pathways for Māori student success at the University. He's now a professional teaching fellow in Engineering and aims to weave te ao Māori into his work. He will also be pursuing his doctoral studies.

"There aren't many Māori in Engineering, but it doesn't have to stay that way. I hope my contribution can make it a little better," he says.

Paraone enjoys whakairo (carving) and tukutuku (weaving), and was mentored by renowned weaver Dr Maureen Lander.

OPERA SINGER TAKES THE STAGE

Singer Tayla Alexander crossed the stage as a spring music graduate with first-class honours, hitting another high note for 2023.

The 22-year-old has signed a multi-milliondollar production deal to record an album. She heads to Europe this month to work on it.

The album offer came after German producer Daniel Loitz discovered a video of her and her dad Dwayne singing a cover of Elvis Presley's 'Love Me Tender' during the Covid-19 lockdown in 2020. The video had been recorded as a tribute to her grandad, who had been diagnosed with cancer.

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

The deal with Loitz will see Tayla record an album of schlager music – a style of European crossover pop music – which will be mastered at the iconic Abbey Road Studios in London.

As part of the deal, Tayla will also get to record a duet with her dad. "My dad is so excited."



He teaches the basics of carving for keen learners. "I've recently finished a collaborative project with my whānau and friends where we wove tukutuku panels. I'm in the final stages of stitching it together, and it will sit in my office as a marker of this journey I've completed, and the journey I'm about to embark on."

His research will explore the adaptations of post-colonial technologies, like metal chisels and tattoo guns, and apply engineering technologies to create Māori art.

"I want to know on a philosophical level if Māori are okay with the evolution of our arts; how much we want to retain our pre-colonial history methods and how much we allow them to be dynamic and evolve. As a mechanical engineer, I'd be keen to explore things like making a mechanical system that weaves a whāriki, for example, or one that can carve a pou. We have technologies like the keys you get at a 21st that are laser cut. So could we take it further but still uphold tikanga and tika to Māori?"

Paraone grew up in Gisborne, excelling academically at Gisborne Boys High School, where he also worked on his carving skills. "I was Year 11 when I began learning how to carve, and it was actually so I could carve my sister's 21st key."

Te Rina Triponel
 Full story:
 auckland.ac.nz/paraone-engineering



Tayla has been working as a soloist including with New Zealand Opera, the Auckland Philharmonic Orchestra and Auckland Youth Orchestra. In December, she'll begin two weeks of rehearsals for *The Phantom of the Opera* before flying to Japan to perform 16 shows. She is also studying part-time towards a Graduate Diploma in Applied Psychology at the University of Auckland and plans to start her masters overseas next year.

"I see myself performing for quite a long time, but I could see myself in a leadership role at a university or something along those lines. Studying psychology is hugely beneficial."

Tayla is thankful for her lecturers at the School of Music, including Dr Morag Atchison, for "taking me seriously and making it work".

Hussein Moses

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

MORE GRADUATION STORIES auckland.ac.nz/grad-stories



MERRYN TAWHAI: A NATURAL PROGRESSION

Professor Merryn Tawhai's path to promotion started when she became a research fellow at the newly established Auckland Bioengineering Institute in 2002. Now she leads the team.

When Professor Merryn Tawhai was announced as the new director of the Auckland Bioengineering Institute (ABI), it wasn't much of a surprise to many.

While it is a flagship position in New Zealand and on the world stage, Merryn's new role is not a zero-to-hero move. For the past decade, she has supported the University's largest postgraduate research institute as its deputy director and has been an integral player in the ABI's strategic direction and vision.

Merryn knows she is now leading "a fantastic group of people".

"I appreciate the trust they have put in me. Stepping into the role of director when you know you have the support and trust of your colleagues is quite special."

This pinnacle position isn't just about her stepping up.

"We have had a visionary leader in place, Distinguished Professor Peter Hunter, an exceptional person, so there are very large shoes to fill. The change of leadership recognises though that the ABI is facing an exciting and different future. We now need to find our way forward as a collective."

Merryn is one of a growing number of senior female engineering scientists at the ABI, including associate professors Alys Clark and Kelly Burrowes and Dr Jenny Kruger.

Despite being a woman working in the pointy end of STEM (science, technology, engineering, and mathematics), Merryn hasn't felt confronted by gender-based challenges.

"Because of the culture of openness and collegiality at ABI and the attitudes of the people around me, I didn't have to think about my sex or gender as I was progressing through my career. I just carried on, and did what I did."

She says she has been fortunate to have had very strong mentors in research and leadership, including Peter and Distinguished Professor Dame Jane Harding as well as other academics overseas.

As she has risen to more senior levels, she appreciates the place of role models for others.

"Whether you are a woman, Māori, or of Pacific descent, having senior role models is really important."

Merryn's appointment came after an international search, but she believes her perspective as a research-focused academic here in Aotearoa New Zealand provided her a distinct advantage.

"The New Zealand research system and the funding available here have limitations compared to other regions. It is really important "Because of the culture of openness and collegiality at ABI and the attitudes of the people around me, I didn't have to think about my sex or gender as I was progressing through my career. I just carried on, and did what I did."

- Professor Merryn Tawhai, director of the Auckland Bioengineering Institute

to understand these challenges to understand what our researchers face on daily."

Twenty-three years ago, Merryn was on the final stretch of her PhD in Engineering Science when Professor Hunter, one of her supervisors at the time, opened a fledgling new entity – the ABI.

Merryn was raising a new entity herself – her second daughter, who was born halfway through Merryn's doctoral studies.

Back then, a cluster of engineering scientists who had graduated from the University of Auckland had headed to the likes of University of Oxford and McGill University in Quebec to undertake prestigious postdoctoral fellowships – and had returned full of promise and enthusiasm.

For Merryn, the balance of a career in engineering science and motherhood steered her into an unworn path. Initially supported by commercial funding and her first Marsden grant in 2001, and then as the Maurice Paykel Postdoctoral Fellow in 2004, she began her career in "the best possible place in the world" and is now one of a wave of senior scientists and engineers who have developed their research careers completely under the ABI umbrella.

Merryn says she has been fortunate to have been in the ABI as it has grown. "You can't look elsewhere in the world and say, 'It's a shame I didn't get that experience overseas', because I had the best opportunities here."

Merryn's PhD focused on developing an anatomically based mathematical model of the human lung to better understand how gases, water vapour and heat behaved inside the organ. From her first day on the job at ABI, she was charged with leading and building the Lung and Respiratory Systems group to develop a mathematical model of the lung from the cellular level through to the whole organ.

The aim is to help understand the pathological changes that can occur in disease



Dr Joyce John, Dr Behdad Ebrahimi, Associate Professor Kelly Burrowes and Merryn. The researchers are all part of Merryn's lung research group. Photo: Matt Crawford



Dr Joyce John and Atefeh Rahimi display their lung research on a hologram projector. Photo: Matt Crawford

and to develop new digital technologies to predict patient response to treatment. At its inception, the group included Merryn and her first PhD student – now Associate Professor Kelly Burrowes – and now comprises a multidisciplinary research programme in applied computational physiology of the respiratory system with about 20 ABI researchers.

"The respiratory system is fascinating from a bioengineering perspective because it brings together multiple processes that we consider fundamental to engineering – fluid flow, tissue mechanics, gas and heat exchange – through this beautifully intricate and delicate structure."

In the immediate future, the ABI is poised to leverage a surge of demand for digital technologies in health tech which are attracting international research investment.

"With ABI's stellar record of nearly 30 years of computational physiology and bioinstrumentation, we are in a prime position to leverage ourselves as a world leader," says Merryn.

"There is huge potential for digital humans to be transformative technology in healthcare. The ABI is already the leader in infrastructural capability to enable digital humans to be more than just a concept. This is a unifying whole-ofinstitute initiative."

All this world-class research requires worldclass funding. Through Merryn's efforts to date, both individually and in collaboration with other ABI staff, she has seen in excess of \$65 million "You can't look elsewhere in the world and say, 'Shame I didn't get that experience overseas' because I had the best opportunities here."

– Professor Merryn Tawhai

come into the Institute through domestic and international funding.

"The fact remains that we are highly dependent on our research grant income and ensuring that our researchers are supported so we don't lose the capability we have grown and invested in."

As the ABI's new director, Merryn has many balls in the air. She is balancing the demands of a new leadership role and running a successful research programme, while staying involved with the research projects she currently leads. She is also continuing to grow her own research area and ABI-wide opportunities.

"We have several new initiatives under way to provide longer-term financial security for our researchers so they can focus on what they are really good at, which is doing their research, being innovative, coming up with new ideas."

Megan Fowlie



THE INTUITION OF SALOME TANUVASA

Salome Tanuvasa's multi-media arts practice has been described as based on an intuitive technique "akin to automatic writing", informed by the space around her, in turn creating a space for what she is feeling.

Sinuous lines and peculiar shapes dance across the many surfaces of her artworks, five of which are held in the University's Art Collection.

Depending on the medium, her works are often rapidly executed in paint, pastel and pencil; or, are more slowly brought to life in fabric. Salome's practice brings together a striking colour palette and an intuitive method, resulting in an eclectic oeuvre in which each artwork responds to the environment in which it was created.

Salome is based in Tāmaki Makaurau Auckland and is of Tongan and Sāmoan heritage. Born in 1987, she is a graduate of the Elam School of Fine Arts, holding a Master of Fine Arts which was followed by a Diploma in Secondary Teaching.

She has been exhibiting since 2012, a notable exhibition being *Stars Start Falling* curated by Hanahiva Rose at Govett-Brewster Art Gallery (2021). The show linked Pacific artists of different generations and brought Salome's works into conversation with paintings by Teuane Tibbo (the first Pacific artist to hold an exhibition at a New Zealand dealer gallery, in 1964) and weavings by Ani O'Neill, who rose to prominence in the 1990s and is part of the Pacific Sisters Collective.

Salome's practice centres around her immediate surroundings and often reflects the space she is in at that particular time. As well as her artistic work, Salome is a mother and a fulltime teacher. This means her dedicated studio time is fleeting, as reflected in her 2018 exhibition titled, *In a Midnight Hour* (Tim Melville Gallery). The works in this exhibition, like many in her oeuvre, were created from the dining room table at home in the depths of night, when the house was quiet and Salome had the space to work in what she calls her 'state of flow'.

In a text from Salome's 2022 solo exhibition at Page Galleries, this intuitive technique is described as "a process akin to automatic writing – where words are produced subconsciously – the artist's mark-making is intuitive and inspired by that which she observes in nature and her immediate surroundings. Tanuvasa's forms begin to take on a visual code or language, or rather she creates space for a particular feeling or sensation to emerge".

This is exemplified in *Untitled* (2021), a monumental acrylic on unstretched canvas painting, first commissioned for the exhibition *From Our Beautiful Square* at Gus Fisher Gallery (2021) and now part of the University Art Collection. Measuring two metres by seven, the painting is frieze-like, with Salome's gestural markings stretching across the canvas. The marks not only respond to the architecture and 'place' of the gallery (it was created in situ), but also document Salome's own movements, almost like drawn markers of time and place.

Four of Salome's textile banners are also part of the collection. Three are titled by the single word cut from calico that centres their composition; *Beauty* (2019), *Essence* (2019) and *Informal* (2019). The fourth, *Reflections* I (2018) is around three times the size, with the words 'you are loved' as the subject. In contrast to her drawings, the shapes and words are slowly hand-stitched in these calico works, sparking a contemplation of their meaning and deeper musings around the artist's intention of their focus.

It is rare to witness an artist at work, and when

Above: Untitled (2021) was created in situ at the Gus Fisher Art Gallery. Below: The 2018 textile banner, Reflections 1.



engaging with Salome's practice I'm reminded of when I once had the opportunity to see her process in action. She incorporated a largescale artwork directly onto the 12m wall at the Tim Melville Gallery as part of solo exhibition *Mirrored Systems*.

Making an artwork for a wall is not dissimilar to having an enormous blank canvas to work on, and I wondered how Salome could not feel intimidated. Would she make a preliminary sketch and then transfer it to the wall? Where would her first mark go? To my surprise, and without saying anything, she picked up a humble charcoal pencil from her selection of paint testpots and marker pens, before walking straight up to the wall and confidently making her first (rapid) form. Blink and you would have missed it.

I left her alone to work and returned the next day to find an expansive wall-drawing that marked her presence in the space, embodying her focus and the utmost resolve in her method.

Madeleine Gifford, Art Collection adviser



ANNIE GOLDSON: ARTS LAUREATE

Professor Annie Goldson has been named a 2023 Arts Foundation Te Tumu Toi Laureate in the field of documentary filmmaking.

Annie was the recipient of the \$35,000 Dame Gaylene Preston Documentary Film Makers Award from the New Zealand Arts Foundation Te Tumu Toi, awarded every second year to an outstanding documentary filmmaker.

A lecturer in communication and screen production in the Faculty of Arts, Annie's bestknown works include *Punitive Damage, Georgie Girl, Brother Number One, Kim Dotcom: Caught in the Web* and *A Mild Touch of Cancer,* for which she received a best editor award at the 2021 New Zealand Film and Television Awards.

She has more than 12 award-winning films to her name. Her latest film, *Red Mole: A Romance*, a documentary feature about the radical 1970s New Zealand theatre troupe, showed at the recent New Zealand International Film Festival and is scheduled to appear in selected cinemas around the country in November.



Humanities from the Royal Society Te Āparangi. Annie says she considers herself lucky to have had a rich career in Aotearoa and thanked the Arts Foundation for the honour.

"Whatever medium you work in, making art can feel a long, at times arduous journey, so to receive this honour is awesome.

"And a shout out to Waipapa Taumata Rau and its recognition of my films as my research. University support has allowed me to make the kind of work I've always wanted to."

Alumnus Robert Jahnke (Ngāi Taharoa, Te Whānau a Iritekura, Te Whānau a Rakairoa o Ngāti Porou), who has a Master of Fine Arts from Elam, was among the other laureates. The sculptor and arts educator received the Jillian Friedlander Te Moana-nui-a-Kiwa Award.

Full story: auckland.ac.nz/annie-laureate

BOOST TO ARTS CENTRE'S WORK

A University of Auckland research hub focused on the role of the arts in solving big social issues has just secured its future.

The Centre for Arts and Social Transformation (CAST) has received a substantial pledge from long-time supporter the Chartwell Trust to fund it for another five years.

CAST projects include looking at how an arts-based approach can tackle issues such as homelessness, post-disaster responses, disengagement from schooling and mental health and well-being. CAST director Professor Peter O'Connor (pictured) is delighted at the support of the centre's ambitious vision.

"Our partnership with the Chartwell Trust is based on a shared vision for wanting to understand the role and potential of the arts in everyday life," he says.



The centre is housed within the Faculty of Education and Social Work. Faculty Dean, Professor Mark Barrow, says the funding continued to allow CAST to establish itself in academia and the wider community.

"Such donations are rare in the field, and the faculty appreciates the trust's ongoing commitment to the centre's valuable work." Julianne Evans

Full story:

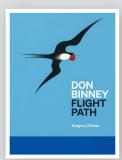
auckland.ac.nz/cast-boost-by-chartwell

STAFF DISCOUNT ON BOOKS

University staff can get ten percent off everything in store at Ubiq bookshop, Level 1, 2 Alfred Street. See instore for details.

BOOKS

Don Binney: Flight Path Alumnus Gregory O'Brien's book about artist Don Binney (1940-2012), alumnus and former staff member, launches on 19 October. Binney's



stylised depictions of birds feature prominently in the University art collection. As such, the book launch accompanies an exhibition of his artworks at Old Government House, curated by Associate Professor Linda Tyler. Gregory's 400-page book of Binney's letters, journals and other writings is the first full-length monograph of Don Binney. **Gregory O'Brien, Auckland University Press, \$90, released on 19 October**

Remember Me: Poems to Learn by Heart from Aotearoa New Zealand

Are you envious of people who can rattle off poems they've memorised? Award-winning author



and editor Anne Kennedy makes it easy in this collection of poems by New Zealand writers. It includes poetry by honorary alumnus, the late Hone Tūwhare, as well as Professor Selina Tusitala Marsh (Faculty of Arts). Anne Kennedy, editor, AUP, \$45, 19 October

WIN! We have one copy of Remember Me

to give away thanks to AUP. Simply email: uninews@auckland.ac.nz by 20 October with *Remember Me* in the subject line.



DESIGN AWARD

Professor Melinda Webber (EDSW) and Te Kapua O'Connor (Arts) have won Best Non-Illustrated Book at the 2023 PANZ Book Design Awards for A Fire in the Belly of Hineāmaru: A Collection of Narratives about Te Tai Tokerau Tūpuna (AUP). The book was translated into te reo Māori by Quinton Hita and both editions were designed by Duncan Munro with cover art by Shane Cotton. Read more: **bookdesignawards.co.nz**

MĀRAMATANGA

CHIPPING IN BUT WHY IS IT THUS?

I volunteer for the Chip Packet Project New Zealand where I have learned more about the dire housing predicament of a significant section of our local community, especially in Auckland.

The project was founded by Terrena Griffiths in 2021 and is based on a similar organisation in the United Kingdom. It gives direct assistance to whānau struggling with homelessness and unhealthy homes, using volunteer labour and rubbish from foil packaging. Discarded chip packets are reused as blankets, bags, pillows, and ground sheets. The blankets, with shiny sides facing in, act like emergency blankets where the user's body heat is reflected to help keep them warm and dry in cold or damp conditions.

Typically, a volunteer fabricates a five-byfive grid of washed and opened-out packets by fusing them together using a domestic iron set on 'silk' to get a smooth bond and ironing the seams using a piece of baking paper to avoid direct heat on the packet's plastic surface. The blanket is then encapsulated in a lighter plastic (pallet wrapping donated by Mitre 10) and fused again to make it robust. Finally, the edges are folded and fused to complete the process. The blankets can last on the streets for ten years.

These emergency blankets can also be used in natural disasters where communities and homes have been devastated by extreme weather events or seismic activity. The Chip Packet Project has provided 302 blankets to people since 2022. Blankets are distributed to the homeless via charities and to those living in substandard accommodation via kindergartens in the poorer parts of Auckland, where children are living in unheated homes, garages, or cars and cannot sleep because they are freezing in winter. The project provides direct relief to those suffering from homelessness and housing degradation by ensuring people can stay warm.

Schools around the country act as collection points for used foil packaging and these are then washed and delivered to a Chip Packet Project centre where more than 85 volunteers nationally participate in the manual manufacture of the blankets and accessories. This is extremely labour-intensive, and each blanket takes about four hours to make. The organisation also collaborates with the New Zealand Corrections Department, where prisoners can do their community service by making blankets. Scouts New Zealand also takes part.

This is what New Zealand has come to – a land of phenomenal wealth for a few, in which



"This is what New Zealand has come to – a land of phenomenal wealth for a few, in which an alarmingly large proportion of our population is homeless, kept warm with repurposed chip bags."

- Professor Diane Brand

an alarmingly large proportion of our population is homeless, kept warm with repurposed chip bags made by volunteers. Though all demographics are affected by our housing crisis, Māori and young people are overrepresented, with 62 percent of the homeless aged between 21 and 40. According to the 2018 census, Māori make up 43 percent of homeless people in Auckland, despite making up only 16 percent of the population. For Pacific peoples the figure is 18 percent. This means 61 percent of the homeless are Māori or Pacific.

With this data being from the 2018 census, evidence suggests the problem has worsened since. According to the Northland District Health Board, homelessness for Māori in Northland increased tenfold between 2018 and 2021. Many more Māori and Pacific live in substandard accommodation in both regions. This homelessness is a national shame. Māori and Pacific homelessness perpetuates longestablished inequities resulting from colonisation in the region.

The Ministry of Social Development estimates 69,000 people across the country need assistance because of homelessness. There is demand for more than 22,200 blankets, a volume that current volunteers fall short of meeting.

Discarded chip packets are the result of junk food consumerism, and they add significantly to landfill waste. They take 80 years to break down in landfill, the chips have little nutritional value and contribute to poor health. The Chip Packet Project transforms these negatives to make a positive community contribution, and a climate change initiative, by clever design and volunteer participation. The activity creates a community of makers for people seeking to join a group or contribute to a worthy cause. In practical terms, homeless people are warmer and are perhaps conscious that someone cares enough to make these items to help alleviate one aspect of the hardship of living on the streets.

The demand for affordable housing is urgent but the need for shelter, warmth, and care for the homeless is acute. It's time for politicians of all stripes to front up and begin to fix a situation decades in the making and involves former National and Labour governments. Policies as diverse as the sale of state housing and the defunding of medical care, mental health services, law and order, and education are the harbingers of this crisis.

While politicians contest our votes and disappoint on policy delivery, volunteer groups will continue to chip away at the challenge one foil packet at a time.

See: chippacketproject.org

This opinion piece first appeared on Newsroom.

Professor Diane Brand is a former Dean of CAI. She works part-time as director of academic reviews and still teaches in the School of Architecture and Planning.



The views in this article are personal opinion and not necessarily those of the University of Auckland.