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Waipapa
Taumata Rau
University
of Auckland

UniNews



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by Simon Young

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Email: uninews@auckland.ac.nz

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



Alys Clark

Womb to improve

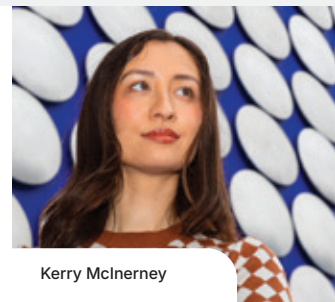
Professor Alys Clark (ABI) talked to RNZ's *Nine to Noon* about her research using innovative physiological and computational models to study the uterus. This remarkable organ prepares every month for the chance of a pregnancy and when conception happens, it adapts again to support growth via a placenta.

tinyurl.com/clark-rnz-uterus

AI data centres under the microscope

Dr Kerry McInerney (Computer Science) provided commentary on Newstalk ZB and in the *NZ Herald* on the potential impacts of the expansion of AI data centres in Aotearoa. The AI ethicist highlighted the need to consider the infrastructure and resource demands involved.

tinyurl.com/mcinerney-nzherald-ai



Kerry McInerney



Peter Shepherd

Lose the weight, keep the muscles

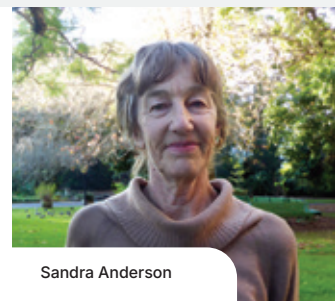
Professor Peter Shepherd (Medical and Health Sciences) told RNZ University of Auckland researchers are developing a potential obesity treatment that targets how the body stores fat rather than suppressing appetite. Preclinical studies show significant weight loss while preserving muscle mass.

tinyurl.com/shepherd-rnz-weight-loss

Secret pollinators

Dr Sandra Anderson's (Science) fascination with birds' unheralded role in pollination drew the attention of *Earth.com*. Her latest research was based in the UK: "Our study is the first to show that native birds pollinate and contribute to fruit-set in native flowering trees in temperate Europe," she said.

tinyurl.com/anderson-earth-pollination



Sandra Anderson



Jeff Smaill and Adam Patterson

Promising new cancer drug

Associate Professor Jeff Smaill talked to RNZ's *Afternoons* about a new cancer drug being developed. Smaill is working with Associate Professor Adam Patterson and Malaghan Institute Professor Ian Hermans on the new drug that, in its early days, is showing exceptional promise.

tinyurl.com/smaill-rnz-cancer-drug



Minh Kieu

Phantom traffic jams

Is the cause of traffic jams just bad driving? It's certainly part of the problem, according to transport researcher Dr Minh Kieu (Engineering and Design). He talked to *Stuff* about phantom traffic jams – those mysterious slowdowns that happen without any obvious cause.

tinyurl.com/kieu-stuff-jams

New VC comes home

The University's vice-chancellor reflects on a warm welcome, and his first priorities as he begins in the role.

For Professor Nic Smith, returning to Waipapa Taumata Rau as vice-chancellor has felt like a homecoming.

His own university journey began at the University of Auckland as an engineering student, before he returned as an academic and later served as the faculty's dean.

So when he was formally welcomed into his new role with a pōwhiri at Waipapa Marae on 3 August, surrounded by University leaders, council members, staff, family and friends, there was a feeling of coming full circle.

"There has been a genuine sense of rejoining a whānau that I have had a connection with at so many different points in my life," says the Vice-Chancellor.

"The pōwhiri was an opportunity to come together with this wonderful group of people whom I, by and large, have known over many years, at a time when we can chart a new direction and new aspiration for the University.

"Being able to gather and be excited by that energy was something special, and it's something I'm looking forward to carrying into the role."

Among the pōwhiri guests were AUT Vice-Chancellor Professor Damon Salesa and Professor Bryony James, Vice-Chancellor of Te Herenga Waka, Victoria University of Wellington, where Professor Smith previously served as vice-chancellor. Celebrating with friends and former colleagues from across institutions was another highlight, he says.

"I've long thought that, especially in a country like New Zealand, our opportunity to work together is our potential superpower. We need to embrace it internally, but we also need to embrace it between institutions – and embrace that as part of our social contract."

An initial focus for the Vice-Chancellor is meeting and talking with staff and students face to face.

"I'm looking forward to listening and learning about their journeys – both how they've arrived here and the work they're doing now.

"That includes listening to what's important to them, what they find frustrating and what they would like to look forward to. Then it's about taking those insights and, in the context of our wider mission, considering how I can support them to fulfil their roles."



Photos: Chris Louffe



VC Professor Nic Smith's pōwhiri at Waipapa Marae was a celebration with whānau, colleagues and friends, including (left) Victoria University of Wellington VC Professor Bryony James and AUT VC Professor Damon Salesa.

As well as being rich in talent and capability, the University is also a large institution located in the middle of a super-diverse city that is internationally focused, all of which he describes as "the ingredients for something remarkable".

And in a time when complex debates can be reduced to simple positions, short-term thinking often prevails and fast-moving technology is exacerbating uncertainty, he says universities matter more than ever.

At their best, he says, they offer extraordinary people the freedom to take big intellectual gambles over long periods of time. They also provide a space where differing views can be expressed.

"I want Waipapa Taumata Rau to be a true meeting house of ideas," he says, "where different perspectives come

together respectfully, where ideas are tested vigorously – but not personally – and where we are willing to change our minds when evidence or others' insights give us reason."

A university education is an opportunity to acquire technical mastery, but he hopes University of Auckland graduates will also be enriched by these essentially 'human' skills.

"I believe their greatest advantage will come from qualities that allow them to transcend any particular technology: the ability to understand a diverse world from multiple perspectives, communicate with people unlike themselves, navigate uncertainty, make sense of complexity and continue learning."



Caitlin Sykes

Photo: William Chea

Space missions for students

University of Auckland students will soon be joined by peers from across New Zealand to help tackle one of the world's biggest frontiers – space.

On 30 July, the Faculty of Engineering and Design launched the New Zealand Undergraduate Space Challenge, a new national programme that gives undergraduate students the opportunity to take part in real space missions.

Working in multidisciplinary teams, students will gain hands-on experience planning missions, solving complex problems and collaborating across the academic spectrum – from engineering and science to business, law, medicine and the humanities.

The first universities taking part in the challenge are the University of Auckland, Victoria University of Wellington, University

of Canterbury and Auckland University of Technology.

Dean of Engineering and Design Dr Richard Clarke (pictured left) says education and collaboration are at the heart of the initiative.

“The best way to prepare students for the future is to give them opportunities to apply their knowledge to real challenges, and there are few better examples of complex problem-solving than a space mission,” he says.

“As New Zealand’s space sector continues to grow and build momentum, this initiative will give students an authentic taste of what it is like to work in this exciting industry and help to build New Zealand’s future of space talent and capability.”

Over three semesters, teams will take an idea from concept to reality.

They’ll start by identifying a problem to solve, before building and testing a prototype. Teams will compete to have the strongest concept developed into flight-ready hardware. This will be integrated into a shared CubeSat – a miniature satellite about the size of a loaf of bread – built and operated by the University of Auckland.

To make that possible, the University is providing the shared satellite platform, mission control facilities and testing infrastructure, alongside technical expertise from Te Pūnaha Ātea, Space Institute. It will also receive support from student-led initiatives, such as the Auckland Programme for Space Systems.



Full story: auckland.ac.nz/space-challenge

Fast learners line up for schools’ maths challenge at Hiwa

More than 100 young mathletes took their marks at Hiwa Recreation Centre on 11 and 12 August, where they were put through their paces in the Auckland Maths Challenge.

The maths competition gives student teams between Year 7 and 10, from across Tāmaki Makaurau, the opportunity to test their problem-solving skills, as well as build

confidence and get a taste of life at Waipapa Taumata Rau.

Challenge co-founder Katalina Ma, who is the Pathways Programme manager in the University’s Schools and Community Engagement team, says the competition celebrates excellence in maths. The competition also aims to provide an environment that is culturally affirming for Māori and Pacific learners.

“Early engagement helps students see university as a place where they belong and where future ambitions can take shape,” says Katalina.

Photos: Marilyn Fa'atele



Finding your place with te reo

September is Mahuru Māori – a time to celebrate te reo Māori and find more opportunities to use it in our everyday lives.

Earlier this year, the University launched *He Makau Mauroa*, its te reo Māori strategy for 2026–2030. This sets out the next chapter in the University’s commitment to normalising te reo Māori across University life.

With Te Wiki o te Reo Māori running from 14–20 September, it’s a great time to get behind this kaupapa. And there are plenty of ways for kaimahi and tauira to learn, practise and kōrero around campus. Here are a few ideas:

- ReoSpace in Te Herenga Mātauranga Whānui, General Library is a place to kōrero – whatever your level of reo. Drop in for weekly activities, including Mahi-toi Mondays (art), Taakaro Tuesdays (fun and games) and Waiata Wednesdays (singing). It’s all about giving things a go, learning from each other and having fun with te reo Māori.
- Put your reo to the test and grab a coffee while you’re at it. On 15 September, Samāori Kawhe Kart will be on Wynyard Street, taking orders in te reo Māori. Kia ora! Ka taea e au te tono flat white, koa?
- Want to bring more te reo Māori into your mahi? Te Taumata Ngaio is a University course designed for staff with little or no previous knowledge of te reo Māori. It helps build confidence with pronunciation, greetings, mihi and everyday conversation, with a focus on using te reo in professional settings. The course combines online and face-to-face learning, giving you plenty of opportunities to learn, practise and kōrero.

Pacific precision medicine leaders unite in Sāmoa

University of Auckland experts were among those who came together at a landmark gathering in Sāmoa at the end of July to shape the future of precision medicine, focusing on how it will benefit Pacific peoples.

The inaugural Precision Medicine Conference for Polynesian Peoples, held in Sāmoa from 29–31 July, marked a decade since the publication of groundbreaking research into the CREBRF gene variant, found at high rates among Māori and Pacific populations.

The conference grew from collaborations involving researchers from the University, the Maurice Wilkins Centre and the Oceania University of Medicine Sāmoa. The aim of the event was to look beyond scientific discovery, and to address the cultural, ethical and governance issues needed to ensure precision medicine serves Indigenous communities.

Dr Natalie Netzler, a University of Auckland researcher and conference organiser, says the gathering was intentionally different from a traditional scientific conference.

“We wanted to bring together community voices, clinicians and researchers and weave those strands of expertise together,” she says.

“The goal was to get everybody in the



Photo: Chris Loufte

Dr Natalie Netzler

same waka, moving in the same direction for greater efficiency, greater collaboration and maximum positive impact for our communities.”

The conference opened by reflecting on a decade of research stemming from the landmark discovery of the gene variant. Found predominantly in Māori and Pacific peoples, the variant was first identified in Sāmoa in 2016 by Asiata Professor Satupaitea Viali and their research team from the US.

Research has shown that the variant is associated with higher levels of lean muscle mass and increased bone density, while also appearing to offer protection against Type 2 diabetes.

The findings have contributed to growing evidence that Body Mass Index (BMI), a widely used measure of health, may not accurately reflect body composition in Pacific populations.

“One of the key messages is that BMI doesn’t work well for Pacific peoples,” says Natalie.

“The genetic adaptations we’re learning about are helping us understand that Pacific bodies may be fundamentally different in ways that aren’t captured by conventional health measures.”

[Full story: auckland.ac.nz/pacific-precision-medicine](https://auckland.ac.nz/pacific-precision-medicine)

Obituary: Riemke Ensing

24 May 1939 - 10 August 2026



Photo: James Ensing-Trussell

Netherlands-born poet Riemke Ensing, university teacher, mentor, anthologist, visual arts commentator, peace activist, Depot Artspace cultural icon and writer of some of Aotearoa’s finest poems on migration, recently died at Muriwai, West Auckland.

Riemke was born in 1939, in the occupied city of Groningen in The Netherlands. In 1951,

escaping wartime trauma and bleak post-war conditions, the Ensings endured an arduous migration to rural Dargaville, Northland.

‘It was culture shock from here to yesterday,’ Riemke later wrote, and yet its impact on the impressionable 12-year-old is perhaps what propelled her into writing.

Riemke arrived in Aotearoa with just three phrases in English. A clever student, within 16 years she’d completed her schooling and teacher training at Ardmore Teachers’ College where her lecturers, recognising the bright star in their midst, invited her back to join the staff.

Riemke gained a BA and MA in English literature from the University of Auckland (1964–67) and began her academic career as a tutor and then senior tutor in the English department from 1967 to 1999, becoming an honorary research fellow from 2000 to 2010. A dynamic and memorable teacher, her students remember her fondly. In poetry tutorials, and at readings she organised for visiting and local poets, listeners were enthralled by her eloquent delivery.

In 1977 Riemke edited the landmark publication *Private Gardens*, the first anthology of New Zealand women poets. Fourteen collections followed, five of them dedicated to writers.

In 2000 editor Mark Pirie published a major anthology *Talking Pictures* (2000) with an introduction by Professor Lawrence Jones that confirmed Riemke’s position as a poet of significance: ‘Ensing has her own voice and eye and frame of reference, and the Dutch origins are a significant factor in this uniqueness...’

The second anthology, *Blue is a cracked vase in memory: Poems 2000–2025* (2026) edited by Cold Hub publisher Roger Hickin, crowned almost seven decades of writing and revealed her to be still working at the height of her powers in 2025.

Abridged from a tribute by Deborah Shepard, Riemke Ensing biographer

[Full tribute: auckland.ac.nz/riemke-ensing](https://auckland.ac.nz/riemke-ensing)



Erin Griffey

The fine art of beauty

Professor Erin Griffey's research has found the pressure on high-profile women to maintain a beautiful, youthful appearance was also faced by their peers in Early Modern Europe.

When it comes to beauty standards and products, not as much has changed over centuries as we might think, says Professor Erin Griffey.

With an alabaster complexion, striking eyes and dark curls, the image of Queen Henrietta Maria of France was captured in dozens of portraits by Flemish master Sir Anthony van Dyck.

But these artworks didn't just serve to accentuate the beauty of the consort of the

ill-fated King Charles I of England; they were a means to flex her power.

"Henrietta Maria was celebrated for her radiant complexion and striking eyes and considered beautiful by 17th-century standards," says professor of art history Erin Griffey, who has extensively studied and written a book on the Catholic queen.

"However, she also faced fierce criticism from her opponents, who condemned her love of luxury, theatrical performances and Catholic faith.

"She commissioned many of these portraits herself and deployed them as gifts

with political and diplomatic purposes, so it was all very strategic."

Pictures really are worth a thousand words for Erin, who will be reflecting on her rich and diverse career focused on the Early Modern period in Europe (1500 to 1700) in her inaugural professorial lecture on 30 September.

Erin's interests encompass court culture, portraiture and self-representation, art patronage, dress and jewellery, and, most recently, beauty culture.

Overarchingly, she has been fascinated with women of the period, including the way

Photo: Simon Young

powerful women, like Queen Henrietta Maria, presented themselves in official portraits.

"Portraiture is a really ripe medium for fashioning oneself," she says. "I'm interested in what these powerful women commissioned to shape how they wanted to be perceived by posterity, and by their immediate audiences."

An international academic

Erin describes her academic career as relatively wide and varied.

Unlike many academics, for example, Erin chose not to publish her PhD thesis as a book (her topic was Netherlandish artists' self-portraits).

"And maybe that was quite liberating, because I felt like once I had figured out how to do research well, I could set a research agenda that wasn't encumbered by expectations about a PhD."

Erin grew up in Jacksonville, Florida, the child of academic parents who were also committed and innovative teachers. This gave her an early appreciation of teaching as an honourable profession, to aspire to and take seriously.

"I was able to see first-hand what an impact my parents had on their students."

But she really experienced the power of good teaching while completing an undergraduate degree in art history with a minor in Medieval studies at Trinity College, a liberal arts university in Connecticut.

"Art history really stuck because the teachers were just out-of-this-world brilliant."

Then came an opportunity that changed her life's direction.

"My teachers encouraged me to study abroad for a semester, so I was able to do a course at the Courtauld Institute of Art in London. And that was transformative, because I knew I was doing well at Trinity, but when I did really well at the Courtauld, I thought maybe this was something I could continue doing."

While based in London, Erin was also able to explore Europe and its famous art collections: "It was sort of like I'd been living life in black and white and suddenly I was in technicolour!"

She later got into the Courtauld's prestigious masters programme, where she specialised in 17th-century Netherlandish art. She went on to do her PhD, supported by scholarship funding and part-time teaching jobs.

"I never took [those opportunities] for granted; I always worked. I had a job all through Trinity and the Courtauld."

Then, in 2002, she saw an art history position advertised at the University of Auckland. Despite not knowing anything about New Zealand, or having any contacts here, she applied for the position and found herself on a plane.

"I arrived age 29, and everyone sort of had their friends already," she recalls. "But my colleagues were so kind and generous to me and gave me a lot of autonomy."

And she found the Faculty of Arts an exciting place to work.

"Everyone came in to work, everyone was in their office, everyone went out to lunch together. My inbox was flooded with lunch invitations, not just from art history, but from colleagues in English, history, languages and beyond."

And despite being a European art specialist, she's embraced the art of her adopted country, curating three portraiture exhibitions. This involved dealing with New Zealand modern and contemporary artworks and artists, and collaborating with colleagues in law, business and creative arts.

"Although men, too, have been invested in their physical appearance, across time, women are clearly singled out for having more at stake socially."

Professor Erin Griffey,
Faculty of Arts and Education

A recipe for beauty

Now in her twenty-fifth year of teaching, Erin has supervised 15 PhD and 24 masters candidates and taught around 5,000 students. That includes 79 currently enrolled in her Baroque course, where required reading is her runaway success, *Early Modern Court Culture* (Routledge, 2022).

Originally commissioned as a textbook, the book became a labour of love and will soon have a second, expanded, full-colour edition.

"I've been quite stunned by its success given its niche topic. But I think it's the kind of textbook I always wanted for my students but didn't exist. It's basically a primer on all aspects of Early Modern European court culture with 38 chapters, 36 individual authors from New Zealand, Australia, the US, UK and Europe, really accessible and very much aimed at students."

Her most recent book, *Facing Decay: Beauty, Aging, and Cosmetics in Early Modern Europe* (Penn State University Press, 2025), focuses on beauty ideals, ageing and cosmetics in that period.

Surprisingly, she found beauty ideals from that time were remarkably similar to those of today, as was the relentless pressure on women, particularly those in the spotlight, to retain a youthful and beautiful appearance.

"Although men, too, have been invested in their physical appearance, across time, women are clearly singled out for having more at stake socially, but also greater expertise in, and use of, beauty practices."

Erin says many recipes for Early Modern cosmetics feature ingredients commonly used today – such as rosewater, nut oils and honey – and have been transmitted across long time spans and geographical regions. Others, however, were confronting and no longer in use.

"I found some ingredients shocking to my modern, animal-loving values – for example, puppy fat."

"And I was struck, too, by just how long many of these recipes took to make; it could be intense physical work, not to mention needing the knowledge and experience to make them in the first place."

One of the most popular recipes, she says, is a simple decoction of rosemary flowers and white wine, which appears in numerous sources, including a small, anonymously published book in Italian called *Corona de le Donne* (Ferrara, 1526).

It's one of several recipes that were found to still work, after she recreated them in the lab with University scientists, including Professor Cather Simpson and senior research fellow Dr Michél Nieuwoudt.

"It provided fascinating insight into the making process and the formula created, as well as the chemical compounds and their enduring efficacy in enhancing the appearance of skin."

Reflecting on her career ahead of her inaugural lecture, she says her students have always been central.

"I think it's important students know their teacher is at the coalface of the latest research in their field, and that the international scholarly community takes them seriously and thinks their work is good."

She remains committed to the student experience "from Stage One".

"I've always wanted to make art history exciting, interesting and meaningful, all the way up through to supervision and ongoing mentorship, while remaining accessible to my students – and I believe I've done that."

"That's maybe the proudest thing for me."

Julianne Evans

Erin Griffey will present her inaugural lecture as a professor on 30 September in the Faculty of Arts and Education building Te Pūtahi Mātauranga (B201). For tickets: tinyurl.com/erin-griffey-inaugural



Photo: Simon Young

Associate Professor Sam Holdsworth is leading a number of cutting-edge MRI research projects.

Powers of attraction

Research into imaging technologies is revealing previously unseen aspects of the body. Associate Professor Samantha Holdsworth is determined to turn those insights into better health outcomes.

At the heart of the Mātai Medical Research Institute sits a state-of-the-art MRI scanner – its powerful magnet allowing researchers to investigate everything from concussion and the impacts of meth use on the brain to cutting-edge MRI technologies.

But the machine is also a figurative magnet, says Associate Professor Samantha (Sam) Holdsworth, drawing together local, national and international researchers and members of the Tairāwhiti community.

“The scanner is only part of it,” says Sam, who is the director of the Gisborne-based institute, and a member of the Faculty of Medical and Health Sciences (FMHS) at the University of Auckland.

“A machine like this is a bit like a jumbo jet: you need the pilots, engineers, crew and ground support to make it fly. Operating it

is one thing; using it to its full potential as a research platform takes a whole ecosystem of people and expertise.”

Sam has worked in many contexts, and says working with the community in a regional area, as with Mātai, is unusual.

“It feels more rewarding than anything else I’ve done professionally. You’re constantly hearing from and feeding back to the community, as well as helping to provide a platform for talented people in the region.”

Mātai was established in 2019 as a hub for medical imaging research and innovation, with a focus on clinical research that could be translated into benefit for its Tairāwhiti community.

In May, for example, researchers from Mātai, Tūranga Health and the University published findings showing notable differences in the brains of people recovering from long-term methamphetamine use, compared with a group of non-users. The work was backed from its earliest stages by the Fred Lewis Enterprise Foundation, which recognised the urgency of the issue for Tairāwhiti and New Zealand more broadly.

The research programme is investigating how the brain recovers through abstinence, while evaluating a culturally responsive model combining neuropsychiatric care, clinical science and broader support for its participants.

“It’s a good example of local philanthropy, researchers, community health leaders and university expertise coming together around an issue that really matters,” says Sam.

Return to Tairāwhiti

Taking on the role at Mātai was a homecoming for Sam, who was raised in Te Karaka, a small town about half an hour north of Gisborne. She went to the town’s primary school, before heading off to boarding school, then on to the University of Canterbury to follow her passion for physics.

While she focused on astrophysics as an undergraduate, she’d always been interested in becoming a medical doctor. A simple internet search of ‘medicine and physics’ revealed a whole field she’d never heard of – medical physics – and its different imaging technologies immediately piqued her interest.

She undertook her masters in medical physics at QUT in Australia, before focusing specifically on MRI as a modality during her PhD at the University of Queensland.

“With MRI, there are so many different ways of seeing inside the body,” she says. “There’s so much room to push the field and reveal aspects of the body that we haven’t previously been able to see.”

Postdoctoral research followed at the Lucas Center for Imaging in the radiology department of Stanford University’s School

of Medicine, where she ultimately spent 11 years, becoming a senior researcher.

Where Mātai has one powerful, high-end MRI scanner, Stanford has more than ten, says Sam. But when she returned to New Zealand in 2018 to take up her FMHS role, she was struck by how working in a more closely connected research environment could support collaboration and innovation.

“There were dozens of researchers across radiology and engineering working across different areas of MRI at Stanford, supported by an extraordinary depth of expertise and resources.

“New Zealand operates at a much smaller scale, but one of the strengths of that is that people end up working across disciplines and make the most of what they have.

“At the Grafton Campus, each floor brings together experts from very different fields, and that proximity – combined with a very Kiwi willingness to collaborate and find creative solutions – can be a powerful driver of innovation.”

New MRI techniques and applications

As well as being a director at Mātai and a University faculty member, Sam is part of the new Medical Imaging Research Centre and is a principal investigator at the Centre for Brain Research (CBR).

She oversees several research programmes whose teams also include researchers from other New Zealand and offshore universities, including Stanford University and the University of Washington. Several Mātai projects also involve close collaboration with the University’s Centre for Advanced MRI.

Broadly, the work at Mātai spans the discovery and development of new imaging techniques, their application to better understand health and disease, and their translation into clinical and community benefit.

Alongside its research, Mātai also provides advanced clinical MRI services, helping bring specialist imaging closer to people in Tairāwhiti and creating a pathway for promising new methods to move into clinical practice.

Within the imaging-methods strand, two techniques being advanced are amplified MRI and ultra-high contrast MRI.

Amplified MRI, pioneered by Sam and colleagues during her time at Stanford, involves amplifying the motion of the brain by around 25 times so its movement, not usually visible, can be seen.

“It gives you a completely different way of looking at brain health, opening up all sorts of potential applications,” says Sam.

Early research led by Itamar Terem, one of Sam’s former research assistants at Stanford, together with colleagues, suggests amplified MRI may reveal altered patterns

of brain motion in people with neurological conditions, including dementia.

Early data from another project – a collaboration between Mātai, Eye Institute Auckland, Gisborne Hospital, the University of Auckland and others – shows promise for a quick and non-invasive way to estimate brain pressure. This could potentially reduce the need for invasive procedures such as intracranial monitoring or lumbar puncture.

Work on the other technique, called ultra-high contrast MRI, is being advanced by US-based Kiwi Professor Graeme Bydder, a globally recognised pioneer of new MRI methods, alongside his son, MRI physicist Dr Mark Bydder, as well as radiologist Dr Daniel Cornfeld and their team.

“Seeing that kind of tangible impact among young people is just as exciting for us as the research findings themselves.”

>>>

Associate Professor Sam Holdsworth, Faculty of Medical and Health Sciences

“Graeme and Mark discovered a new mathematical framework for explaining MRI image contrast in a way that is easier to understand,” explains Sam, “and applying this knowledge can produce images that reveal subtle abnormalities in the brain’s white and grey matter with more clarity.”

Early work suggests the method can reveal multiple sclerosis lesions and other white-matter changes that are faint or not apparent on conventional MRI images.

Participation and place

Among the many projects looking at new applications for imaging technologies is one focused on concussion, and involving researchers across Mātai, Auckland Bioengineering Institute (ABI), FMHS, CBR, the Universities of Canterbury, Otago and Oxford, AUT, GE HealthCare and others.

With the participation of Gisborne Boys’ High School students, the study combines brain imaging with data from instrumented mouthguards to better understand head impacts over a rugby season and explore potential objective markers of concussion.

Another project is the Tairāwhiti Child Wellbeing Study, which is working with local children and whānau to build a reference dataset that better reflects the Tairāwhiti population. Working with ABI, the imaging data is helping researchers build computational models of the structure and function of children’s brains, hearts, lungs and musculoskeletal systems.

“What I love about being in Gisborne is that people can take part in studies they might otherwise never have had the opportunity to participate in because of where they live,” says Sam.

Mātai also supports undergraduate students through scholarships and research internships.

“These young people are seeing science in action. We’ve got a number who now want to study medical imaging at the University of Auckland, or do engineering, neuroscience or medicine.

“Seeing that kind of tangible impact among young people is just as exciting for us as the research findings themselves.”

Sam, who returned to New Zealand with her American husband and three boys, is

enjoying living close to her family again after being overseas for so many years.

“Having our boys go to local schools and have a free-range type of upbringing, and being close to grandparents, has been really good from a family point of view.”

Such human connections are also at the heart of Mātai, says Sam, who credits many for backing the institute’s vision and progress so far. These include Mātai kaiwhakahaere Leigh Potter, Tūranga Health CEO Reweti Ropiha, MNZM and the wider Mātai and University teams.

She also credits mentors, including CBR founding director now Mātai patron Sir Richard Faulk; ophthalmologist Professor Dame Helen Danesh-Meyer; and FMHS head of anatomy and medical imaging Associate Professor Miriam Scadeng.

Iwi, health, industry, academic, community and philanthropic partners have also been crucial, including cornerstone funder Kānoa, the government’s regional economic development and investment unit.

“It’s been a real honour to return to New Zealand, be part of a cutting-edge university, and work alongside the Mātai and uni teams, and our community, research and industry partners, to build something together.

“Being able to do this alongside such a great group of people is probably the part I value most.”

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Caitlin Sykes

Celebrating the art of Terry Stringer

The work of one of our most celebrated sculptors is comprehensively covered in a new book, edited by Associate Professor Linda Tyler.

September is a busy month for art historian Linda Tyler, with the public release of two major – and connected – projects.

Stringer: The Art of Terry Stringer, a book edited by the University of Auckland associate professor, comprehensively chronicles the work and creative world of one of New Zealand's most celebrated sculptors and will be released on 10 September.

In conjunction with the book's release, an exhibition curated by Linda opens at the New Zealand Portrait Gallery in Wellington. It's focused on the friendship between Stringer, an Elam alumnus, and the early 20th century modernist artist and long-time Elam teacher Lois White.

The pair first met in the late 1970s while teaching at the Auckland Society of Arts, when White was in the late stages of her career and Stringer was emerging.

At that point, White had largely been forgotten as a painter, says Linda. But after Stringer saw White's work at her Blockhouse Bay studio, he facilitated her introduction to the well-known gallerist Peter McLeavey. The introduction was made via Stringer's art school friend, Richard Killeen.

"As a result of that, Lois White got her very first solo exhibition in 1977 with Peter McLeavey, around age 76. She was so delighted and so grateful to Terry; they had a very sweet, warm friendship."

Stringer also invited photographer Marti Friedlander to White's studio, and Friedlander's subsequent portrait of White featured in a 1981 *Art New Zealand* interview with her. White's well-known painting 'Fleet's In', depicting the arrival of US troops in Auckland, also featured on the cover of the magazine. "That really put her on the map," says Linda.

And the influence went both ways. Linda sees parallels between the geometricised figures in White's paintings, and the Cubist faceting in Stringer's sculptures, which also often feature the human form.

Stringer has produced sculptures depicting many famed New Zealanders, including writers and artists such as Katherine Mansfield and Rita Angus, and also of White in 1978.

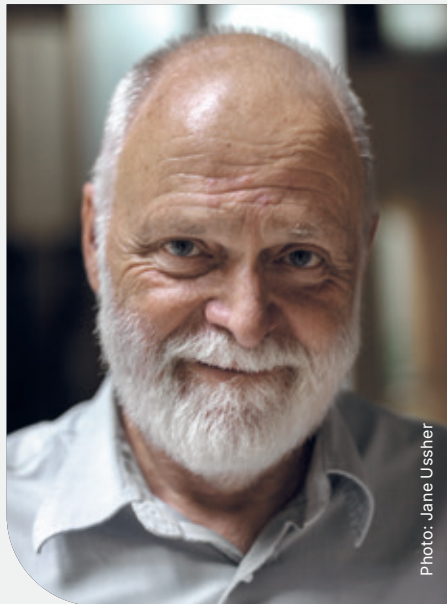


Photo: Jane Ussher



The work of sculptor and Elam alumnus Terry Stringer (above) is the subject of a new book, edited by associate professor of art history Linda Tyler (right).

"But he didn't depict her as she was in life at that time; instead, he depicted a young Lois based on her self-portraits from the 1920s and 30s when she was incredibly ambitious," she explains.

"He was a young artist starting out on his career, and he loved the idea of their parallel trajectory.

"I think he was thinking about the long game and was looking at examples of how you could sustain a practice over a long period of time. But in doing that, I think he also saw all these advantages he had – like a gallery network through which to sell work – which she hadn't had."

Stringer's connections to White are among the many experiences and influences explored in *Stringer* – a 448-page book that covers the sculptor's 60-year contribution to New Zealand art.

Along with a substantial introductory biographical essay by Linda, the book features essays by Peter Simpson, Mark Hutchins-Pond, Mark Stocker, Andrew Douglas and Robin Woodward, each focusing on different aspects of Stringer's body of work. It is lushly illustrated with photos of Stringer in his studio by Jane Ussher, and of the artist's work by art photographer Haru Sameshima.

Linda met Stringer at his Auckland home and studio every Thursday for a year while working on the book. Together, they would look at different series of his works to reflect on his 60 years of practice.

At a time when many galleries have moved on from retrospective exhibitions of living artists' work, Linda feels it's her duty as an art historian to be involved with such projects.



"I had the chance not only to hear about the work from the artist, but to engage, ask questions and really have it explained to me. Because I'm not a maker, that really helped me understand the importance of his practice and the learning process the artist goes through when making something," she says.

"I feel it's a real tribute to an artist if you can do a project that encapsulates and celebrates their life's work and conveys their contributions."



Caitlin Sykes



***Stringer: The Art of Terry Stringer*, edited by Linda Tyler, Massey University Press, \$90**

Elam full circle also marks a milestone

Dr Sione Faletau's recent appointment at Elam, in the School of Creative Arts, represents something of a homecoming, and a milestone for the school.

Sione, who completed a Bachelor of Fine Arts Honours (First Class), Master of Fine Arts (First Class Honours) and Doctor of Fine Arts at Elam, has recently been appointed a permanent lecturer at the school.

A Tongan artist and researcher with connections to the villages of Taunga and Lakepa, Sione is Elam's first tenured lecturer of Pacific heritage.

"It's a privilege to come back and contribute to a place that played such an important role in my own development as an artist," says Sione.

"As a Pacific person, I understand the importance of seeing yourself reflected in teaching spaces. Representation matters because it helps students imagine what is possible for their own futures."

However, his pathway to this point was far from straightforward and Sione says he never imagined he would one day be standing at the front of an Elam class.

"Thinking back to first year, I never thought in a million years I'd be on this side," he says. "It still feels surreal."

Before university, he faced significant challenges during his schooling. After being excluded from one school, he recalls visiting another where assumptions were quickly made about him and his brother because they came from Ōtara.

"They had already made up their minds about us," he says.

It was Ōtāhuhu College that ultimately offered the brothers an opportunity.

"They gave us a chance. That's when it clicked for me. I thought, okay, they've given me a chance, let's make the most of it."

That experience continues to inform the way he approaches teaching today.

Sione understands what it means to enter unfamiliar spaces and question whether you belong. When he arrived at Elam as a student in 2010, many of his classmates came from schools where they had already been exposed to wider artistic disciplines and cultural experiences.

"I remember sitting in lectures and thinking, I've got a lot to catch up on."

"Coming from South Auckland, we'd only really been exposed to traditional forms of painting and drawing. At that time digital design was still fairly new. Then suddenly there was sculpture, photography, installation, sound and all these other possibilities."

Rather than being discouraged, he embraced the challenge.

Over the next decade and a half, Sione developed an acclaimed multidisciplinary practice spanning performance, sculpture, installation, sound and digital media. His work draws on Tongan knowledge systems and often explores questions of identity, cultural memory, masculinity and Indigenous ways of knowing.

His doctoral research examined Tongan masculinity through Indigenous methodologies and talanoa, with more than 140 participants across Tonga contributing important new knowledge about culture, belonging and contemporary Pacific identity.



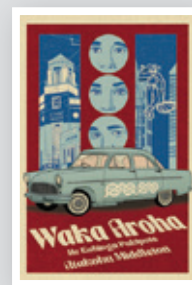
Kim Meredith

 **Full story:** auckland.ac.nz/sione-faletau-elam



Photo: Marco Hidalgo

Sione Faletau



Waka Aroha: He Kohinga Pakipoto

Well-known journalist and Arts alumna Atakohu Middleton has written Aotearoa's

first collection of short stories written entirely in te reo Māori. The stories span time, genres and voices and are aimed at Māori language immersion school students, and language learners from intermediate level up. The book is described as gripping and exciting writing for contemporary Aotearoa.

Atakohu Middleton, Auckland University Press, \$35, released on 10 September



Song of the Birds

Science alumnus Robert Vennell presents this panoramic history of native birds in Aotearoa. The writer of the

bestselling *The Meaning of Trees* and a natural science curator at Auckland War Memorial Museum, Robert describes the vital role birds have played in the lives of those who call New Zealand home. His insights are presented alongside stunning colour illustrations and photography.

Robert Vennell, HarperCollins, \$55



Dance-Floor Romance

Unfolding in the strobe-lit landscape of the club, this latest collection from past Poet Laureate Chris Tse reflects on joy, nostalgia and legacy – and

what it means to make a vocation of vulnerability. Words are described as hitting the page like light on a mirrorball as the poet takes us from the club's spotlight to its shadowy corners.

Chris Tse, Auckland University Press, \$30, released on 10 September



Drs Ahmad Zaki and Young-Min Shim oversee the University's wind tunnel, which is the largest of its kind in New Zealand.



Invisible forces at work

The University's wind tunnel looks unassuming: a plain white corridor, about 24 metres long, with large fans at one end and two mesh screens at the other.

But once the wind kicks in, the tunnel doesn't feel so meek.

The largest of its kind in New Zealand, the Boundary Layer Wind Tunnel can blow at a roaring 18.9 metres per second, or 68 kilometres an hour.

For context, should you find yourself in the tunnel with the fans at full force and when they're testing a model car (about the size of a coffee table), the vehicle would fly at you like a projectile.

Of course, Dr Ahmad Zaki wouldn't allow that to happen; no one is allowed to enter the wind tunnel while object testing is underway, for obvious health and safety reasons.

Ahmad has spent almost a decade here, first as a PhD student researching turbulent flows and, for the past five years, as the senior lab technician, overseeing the Aerodynamics Laboratory, which houses the wind tunnel.

He tends to its specialised equipment, helps build the models that are tested in it, and provides technical advice for the

researchers and students who use the space for experiments. Lead technologist Dr Young-Min Shim manages the tunnel's commercial and industrial activity.

The tunnel's test section, between the fans and screens, is split in three sections: a bike rig for measuring the drag on cyclists and athletes, a rolling road for testing model vehicles, and a large turntable for testing building resilience under certain conditions.

On any given day, Ahmad might be helping students and researchers test bluff bodies – that's any object that interacts with wind – against controlled or chaotic wind conditions. He also flies drones and UAVs, with a motion-capture system inside the tunnel simulating a GPS.

The scale of the tunnel means it can handle a variety of projects, and Ahmad says there are only a small number of such facilities globally.

"It's cool to see the different projects and preparations that happen here, and I enjoy having the freedom to create and build what I need to improve the lab."

Three years ago, he helped the Mechanical and Mechatronics Student Association host a kite-flying competition. The kites were fixed into the tunnel's floor, and judges assessed the kites' design, durability and flight, testing which of the students' designs could best survive the strongest wind forces.

These days, he's helping a pair of fourth-year masters students on exchange from France test an airfoil – a small slice of an airplane wing, scaled down for testing.

The wind tunnel's closed-loop design continuously circulates air, using less energy than designs that need to constantly regenerate airflow. Its boundary layer setup allows researchers to mimic how wind behaves near the ground: slower and more resistant close to the surface, and faster as it rises.

Think of it like honey on a plate, says Ahmad.

"Tilt it, and the lower layers of the honey will stick, while the upper layer starts to slide. The same happens with wind, but it's just not visible," he says.

To create real-world turbulence, the students testing the airfoil have placed a large flag in the test section. When the wind picks up, the flag flickers unpredictably, producing the kind of chaotic flow an airfoil might encounter outdoors.

"Turbulence is measurable, but we want it to fluctuate randomly to simulate real-life conditions, because there is randomness in real life," says Ahmad.

"The wind tunnel helps us understand that randomness in a controlled way."



Jogai Bhatt