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UNIVERSITY OF AUCKLAND
Waipapa Taumata Rau

UniNews

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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.


Sarah-Jane Paine

SNAPSHOT OF TEENAGE LIFE

Growing Up in New Zealand is surveying its 6,000 participants now they are turning 15, offering the first snapshot of what it's currently like to be a teenager. Research director Associate Professor Sarah-Jane Paine (FMHS) spoke to RNZ *Nights* about the survey, noting the results will help inform health and well-being research and policy.
Link: tinyurl.com/paine-rnz-teens


Andrew Hall

CALM AND COOL

Dr Andrew Hall (Faculty of Engineering and Design) spoke to RNZ's *The Detail* about his world-first research to create materials that could help homes stay cool while blocking unwanted noise. His goal is to have the products on the market within the decade and he is working closely with the construction industry.
Link: tinyurl.com/hall-thedetail-cool


Sir Collin Tukuitonga

COVID RESPONSE FAIL

A formal review confirmed the government's Covid-19 response did not adequately support Pacific people who had disproportionately high rates of illness, hospitalisation and deaths. Professor Sir Collin Tukuitonga told RNZ Pacific a targeted response would have better served Pacific and Māori communities.
Link: tinyurl.com/rnz-pacific-covid-fail


Farha Ramzan

KAWAKAWA FOR WEIGHT LOSS?

Dr Farha Ramzan (Liggins Institute) is recruiting overweight adults for a $820,000 study into the potential anti-inflammatory properties of kawakawa, an Indigenous plant. "Inflammation... has been recognised as one of the major risk factors for obesity and related cardiovascular and diabetes diseases," she told Stuff.
Link: tinyurl.com/stuff-ramzan-kawakawa


Nicki Macklin

KINDNESS SPEAKS LOUDER

Kindness is action-based and can be embedded in workplace cultures, even when its workers are all out of compassion and empathy. Nicki Macklin's doctoral research (FMHS) defined kindness for the first time in academic literature, which *Forbes* picked up and highlighted as an essential leadership skill.
Link: tinyurl.com/macklin-forbes-kindness


Susan St John

FRESH TAKE ON PENSION REFORM

Business School economist Susan St John spoke to RNZ about ways to save money by adjusting the superannuation system. She said providing NZ Super as a tax-free grant and creating a higher tax rate for superannuitants' other income, may be better than increasing the eligibility age, or reducing the amount paid.
Link: tinyurl.com/stjohn-rnz-pension

THIS ISSUE

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Something to share? The next *UniNews* is May 2025, copy due 9 April.
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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HIWA OPENS WITH A SPLASH

A spectacular dive into the pool, executed by Commonwealth Games diver and engineering student Frazer Tavener, signalled the official opening of the University's new recreation centre, Hiwa, on 21 February.

Hiwa had already seen more than 100,000 people pass through its doors since its soft launch on 25 November, with staff taking advantage of a special summer membership and students who had already paid their annual $200 fee.

Vice-Chancellor Professor Dawn Freshwater and Hon Chris Bishop, Minister for Infrastructure and Associate Minister for Sport and Recreation, told around 130 guests that the opening of Hiwa was a huge milestone for the University, after a decade of planning.

Guests at the opening included Auckland Mayor Wayne Brown, Deputy Mayor Desley Simpson, Sport New Zealand Group Chief Executive Raelene Castle, Eden Park CEO Nick Sautner, and a number of alumni Olympians and other top athletes.

The Vice-Chancellor said the investment in Hiwa, more than half of which was paid for by student levies over many years, further enhances the University's position as New Zealand's preminent, research-led university.

When the first recreation centre was built in the 1970s, there were around 10,000 people on the City Campus. With almost 50,000 in 2025, the time for Hiwa was right.

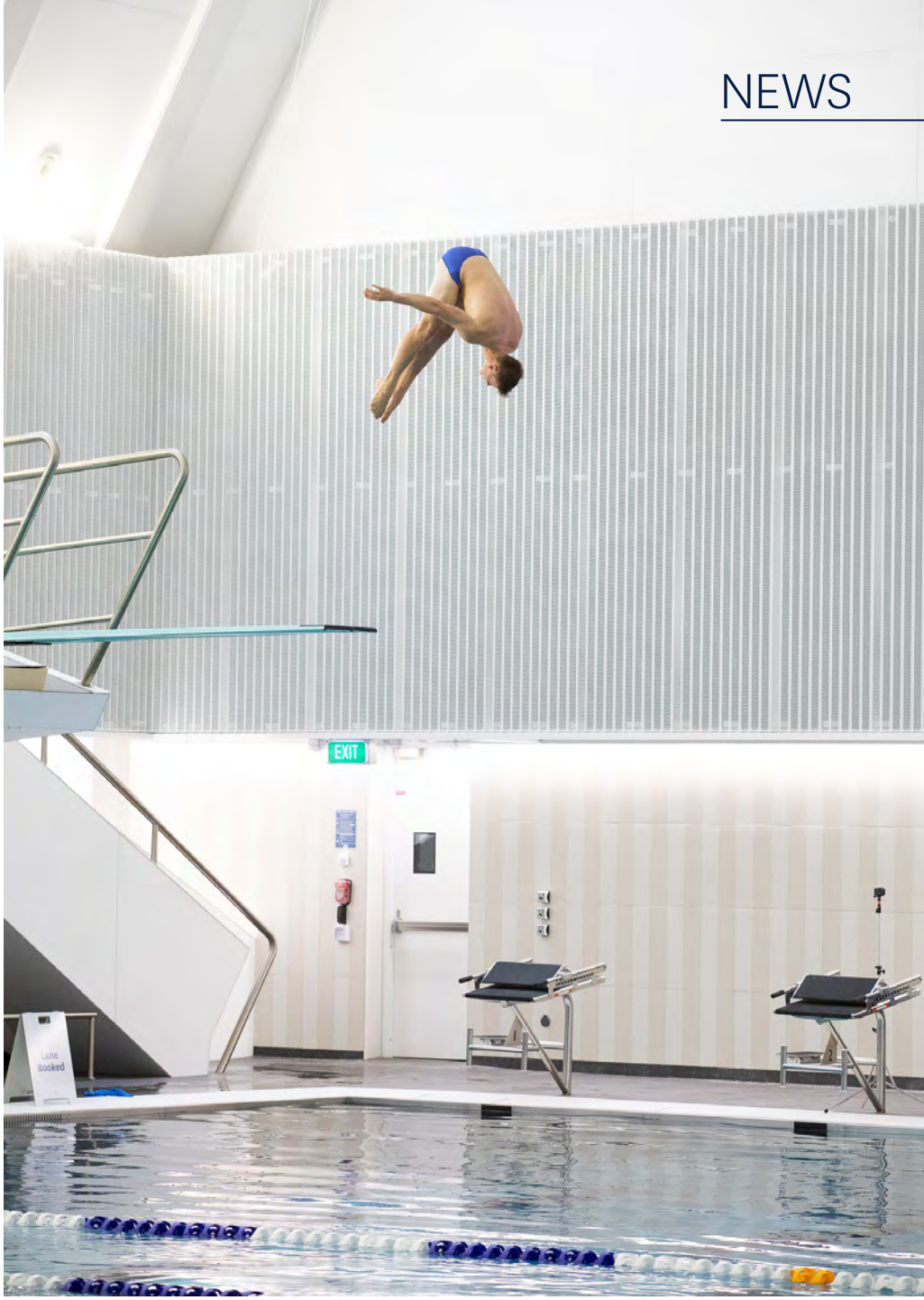
"Hiwa demonstrates our commitment to excellence," she said. "Being a global top-100 university we can now also offer world-class recreation facilities that leading institutions around the world typically offer."

Minister Bishop said that as the former sports minister he had been to a number of sports facilities around the world, and Hiwa was "genuinely quite something. This is a remarkable facility for the University, but also for the city, and the whole country".

The opening also included a short, friendly netball match between the VC's Invitational Seven and the Sport and Recreation Seven, with the latter making the most of having former Silver Fern and Arts alumna Sulu Fitzpatrick (who now works at High Performance Sport New Zealand) on its side.

■ Photos: Dean Carruthers

Full story: auckland.ac.nz/hiwa-opening



BRAIN SENSOR PIONEER ACKNOWLEDGED

Professor Simon Malpas was among groundbreaking Kiwis recognised as a finalist in the innovation category of the 2025 Kiwibank New Zealander of the Year Awards, which were held on 20 March.

A professor at the Auckland Bioengineering Institute, Simon was honoured for his pioneering work that led to the development of the world's smallest implantable brain pressure sensor.

The device is New Zealand's first implantable medical technology, and is revolutionising treatment by reducing hospital visits and providing reassurance to patients and families managing a life-threatening brain condition called hydrocephalus.

The technology has been 14 years in development, and Simon now has a spin-out company, Kitea Health, which has developed the implantable wireless sensor.

Measuring just two centimetres long and weighing 0.3 grams, the sensor has no battery, but is activated remotely by a hand-held 'wand'.

A world-first medical trial, which began in June last year, saw the sensors implanted into adult participants. Following excellent safety data, children were recently able to join the trial.

"After working on this for 14 years, I was in the operating theatre when they put the first sensor in and we did the first measurements and it was pretty emotional," says Simon.

"Then I went to the patient's home a couple of weeks after they left hospital and watched them do their own brain pressure readings. That was another emotional moment."

Simon says the technology will change the clinical treatment and improve the lives of thousands, potentially millions of people around the world. But it has been a long journey.

Learning he was a finalist for the Spark New Zealand Innovator of the Year category of the awards was the icing on the cake after a huge few months for everyone on the project, he says.

"It's great recognition for the team, some of whom have been with me right from the start."

Full story: auckland.ac.nz/malpas-innovation-awards

Professor Simon Malpas has been recognised in the 2025 Kiwibank NZer of the Year Awards. *Photo: William Chea*

Alumni Relations and Development director Mark Bentley.

DISTINGUISHED ALUMNI SERVICE AWARDED

The University's leader of Alumni Relations and Development (ARD) has received a major award recognising his service to advancing the University and championing education.

ARD director Mark Bentley has been named the 2025 Asia-Pacific recipient of the Distinguished Service Award by the Council for Advancement and Support of Education (CASE). A global nonprofit association, CASE focuses on advancing education through alumni relations, communications, development, marketing, and advancement services, as well as championing education's ability to transform lives and society.

The Distinguished Service Award recognises professionals who have made a significant and lasting impact on advancing their institution and earned the respect of colleagues.

Mark says he was flattered to receive the award, but the achievement isn't his alone.

"They say 'advancement is a team sport', so the kudos is really for all the team – and all the University for that matter."

Mark has helmed ARD since 2013, during which time he's led major campaigns to advance the University through fundraising and alumni engagement. This includes the For All Our Futures campaign, completed in October 2019, which raised $380 million – an unprecedented amount for any New Zealand fundraising campaign – and engaged with 120,000 alumni.

During his tenure he's also been active, and a leader, in the international CASE community.

Mark says he fell into the fields of fundraising and alumni relations but feels lucky he did.

"Every day we get to meet amazing and committed people, inside and outside the University, who want to change the world for the better," he says.

"The work is exciting and constantly changing, and in the end makes the University a more capable, ambitious and connected organisation. What's not to like about that?"

INCREASE IN TOP 100 SUBJECTS

Recently released rankings show the University has five subjects in the global Top 50 and 27 subjects in the Top 100 in 2025.

That's an increase of two subjects in the Top 100 compared to 2024, according to the 2025 Quacquarelli Symonds (QS) World University Rankings by Subject, released on 12 March.

The five Top 50 subjects in which the University has achieved notable success are Sports-related subjects (24th), Archaeology (27th), Education (=34th), Marketing (46th) and Civil and Structural Engineering (=38th).

The University has also improved its standing in four of the five broad subject areas, maintaining its position in the 92nd percentile and above in all areas. The strongest performances were seen in the Arts and Humanities along with Social Sciences and Management, where the University has outperformed its peers, including moving ahead of Monash University in Arts and Humanities.

In 2025, the University also has two new subjects in the Top 100: Mathematics, and Theology, Divinity and Religious Studies, and is newly ranked in Classics and Ancient History.

Full story: auckland.ac.nz/2025-qs-subjects

SUPPORT CENTRE FOR TAUIRA MĀORI

Grace Latimer at the opening of He Āhuru Mōwai. *Photo: Chris Loufte*

He Āhuru Mōwai, a support centre for Māori students, officially opened its doors with a dawn ceremony on 10 March.

Designed to provide culturally responsive services, the centre will support tauira Māori by providing academic guidance along with well-being initiatives.

The opening featured a blessing led by Kaiārataki Michael Steedman and Kaitiaki Reo Māori Robbie Paora of Ngāti Whātua Ōrākei. Ngā Tauira Māori, the University's Māori Student Association, unveiled the space, followed by a karakia to bless the new centre.

He Āhuru Mōwai manager Turei Ormsby (Tūhoe, Ngāti Porou, Ngāti Kahungunu) says the space, on the second floor of the Kate Edger Information Commons, has been created to fulfil a need expressed by students.

"By embedding kaupapa Māori values into our approach, we hope He Āhuru Mōwai becomes a space where tauira can find strength in their identity and develop leadership skills that will serve them during and beyond their time at university," says Turei.

"Our vision is for He Āhuru Mōwai to become a leading model of Māori student support and success. We want this space to evolve into a hub that continues to uplift and empower Māori students, while also serving as a centre for Māori excellence, research, and innovation."

Additionally, the centre will support students living in University accommodation, through ongoing pastoral care and regular check-ins. It will also facilitate workshops, events, and initiatives that align with Māori student needs.

Grace Latimer (Ngāpuhi, Te Rarawa), Kaiārahi of Campus Life, played a key role in bringing the vision of He Āhuru Mōwai to life.

She says tauira Māori now have a guaranteed support system.

"It's a new chapter for us. We recognise that there is huge demand on our students and our graduates out there in the world, and we want to try our best to fill that demand and see them all flourish – to go back to their whānau, hapū and iwi, and make a difference," says Grace.

"We want our tauira to feel valued and supported in every aspect of their academic journey."

Full story: auckland.ac.nz/he-ahuru-mowai

RESEARCHERS PROBE STUDENT WELL-BEING

School of Psychology lecturer Dr Sarah Kapeli is co-leading the student well-being investigation with Professor Kerry Gibson.

One of the country's biggest investigations into student well-being is being carried out by psychology students and their teachers at Waipapa Taumata Rau.

In-depth interviews with more than 100 undergraduate students from minority and marginalised groups such as Māori, Pacific, Chinese, South Asian, and LGBTQIA+ will inform student support on campus. Most of the research is being carried out by nine postgraduate students.

Professor Kerry Gibson, who is Pākeha, and Dr Sarah Kapeli, of Tongan descent, lead the project. It is backed by University leadership including the vice-chancellor and the Māori and Pacific pro-vice chancellors. Recommendations on how to better support students are likely to come later this year.

Rates of mental health problems are increasing among university students, according to international studies. Stresses reported by students in the Auckland study include academic pressure and competition; financial insecurity; balancing paid and university work as well as home and study commitments; and feeling disconnected and isolated in a large institution. Wider worries, such as a competitive job market and climate change, are also issues.

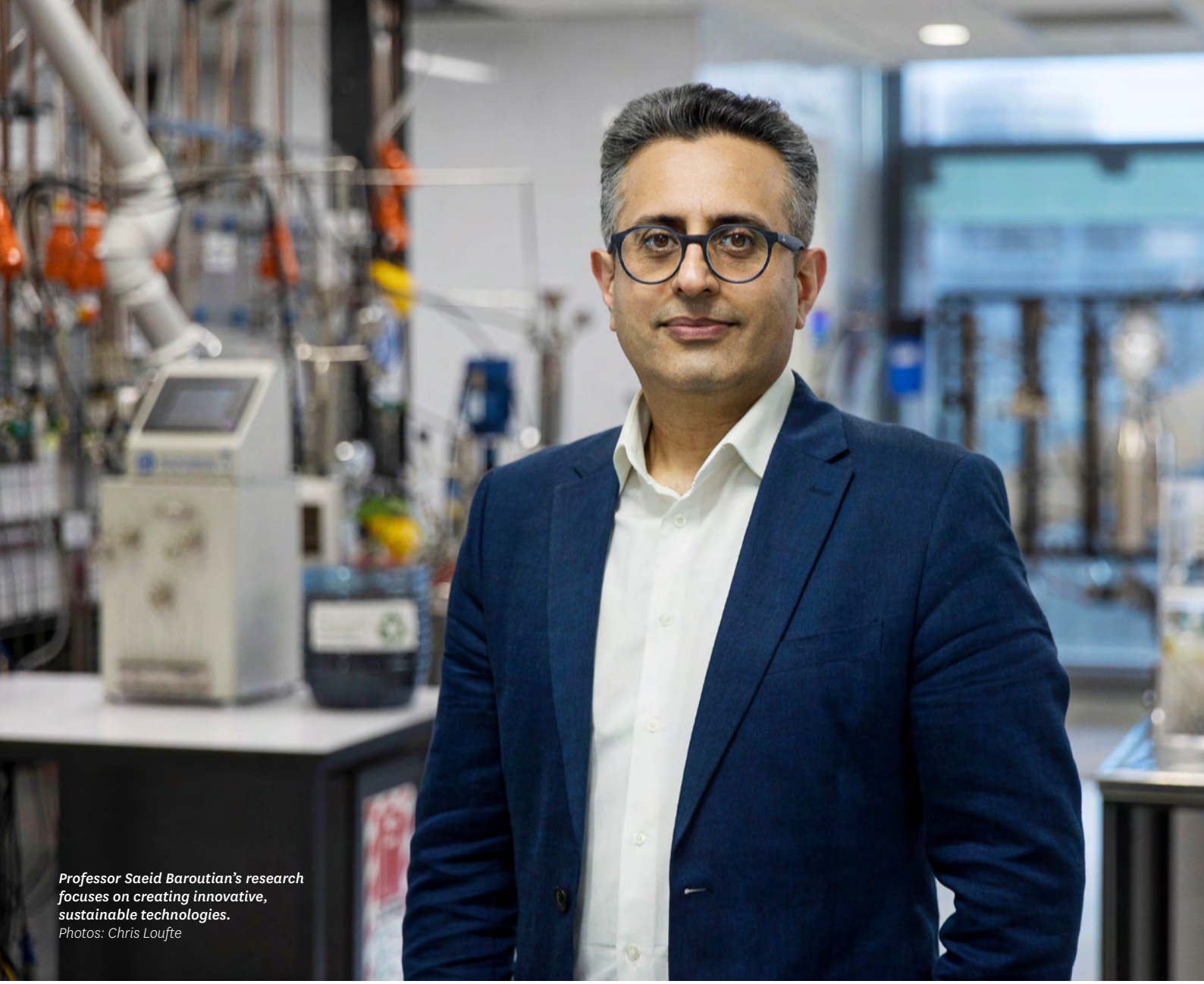
Sarah says finding a sense of belonging is central to young people's success at university and later in life.

"Feeling comfortable at university is important for all students but can be particularly challenging for marginalised groups of students."

The first theses based on the research, which began in 2022, were submitted last month, and Sarah says that being involved in the research has been cathartic for some students.

"They've never been asked questions like this before. We know that some are struggling – they don't know where to get help or don't think they can ask for help," she says.

Full story: auckland.ac.nz/well-being-study



Professor Saeid Baroutian's research focuses on creating innovative, sustainable technologies.
Photos: Chris Loufte

SAEID BAROUTIAN: EARLY MORNINGS, BIG IDEAS

Driven by a passion for sustainability, Professor Saeid Baroutian is developing clean technologies to tackle some of the country's most pressing environmental challenges.

At 4am each day, with his golden retriever Lily by his side, Professor Saeid Baroutian begins his workday from home.

It's a routine he's perfected, with the early hours providing the quiet focus he needs.

Starting early also ensures that his work doesn't cut into the quality time he gets with his wife and daughter.

"Family comes first," he says.

As the deputy head (research) in the Department of Chemical and Materials Engineering, as well as the executive director of the Circular Innovations Research Centre (CIRCUIT), Chair of the Engineering Sustainability Committee and director of the Sustainable Resource Recovery postgraduate programme, he has a lot on his plate.

Saeid's research is dedicated to creating innovative, sustainable technologies that drive the circular economy, enhance resource recovery and minimise waste. He's published more than 140 journal articles and has also co-founded two clean technology start-up companies to bring his innovations to life.

One of these, Gaiatech, aims to address the environmental impact of anaesthetic gases. The technology uses a specially designed canister to trap waste anaesthetic gases. It's a zero-waste, chemical-free and cost-effective solution for hospitals.

His second start-up, Nurox Hydrothermal, focuses on hazardous medical waste and toxic cytotoxic drugs from chemotherapy treatments. Instead of sending these to landfills or incinerators overseas, Nurox uses pressurised hot water to break them down into valuable chemicals.

With support from UniServices, both of these companies are partnering with healthcare and waste management providers to scale up the technology for broader use.

> ***"If a company can produce a more sustainable product at a lower cost, then that gives me a sense of satisfaction. But what truly drives me is seeing the real-world impact of my research."***
>
> ***– Professor Saeid Baroutian, Faculty of Engineering***

"Healthcare waste is a growing global issue, but our goal is to rethink waste, not just manage it. With Gaiatech, we're pioneering a way to prevent harmful anaesthetic gases from entering the atmosphere, and with Nurox, we're ensuring that toxic medical waste is safely broken down rather than becoming an environmental burden."

A positive mindset

Known for his calm demeanour, Saeid credits his ability to manage his demanding schedule to maintaining a positive mindset.

"It's part of my DNA. I always encourage my students to be positive," he says.

Creating positive change also makes those early mornings worthwhile.

"If a company can produce a more sustainable product at a lower cost, then that gives me a sense of satisfaction. But what truly drives me is seeing the real-world impact of my research."

That impact has been especially clear over the past two years, as Saeid has co-led a collaboration with Dr Kiri Dell and other Business School researchers, as well as researchers from the faculties of Science and Engineering and Design, to help a Tairāwhiti community combat climate-related challenges. The urgency of the project grew after extreme weather events such as Cyclone Gabrielle disrupted power and clean water supplies along with other infrastructure.

In addition to this work, Saeid has been applying his technological expertise to turn locally grown kānuka into gourmet products, providing new opportunities for Māori landowners in the same Tairāwhiti community. In 2023, the project secured $1.9 million in government funding to establish a pilot plant.

"My work is not only about contributing to the economy or the environment, but also about people. We need to support people, and especially those who require help."

The path to sustainability

Growing up in Tehran, Saeid's fascination with chemistry from a young age set the stage for his future in engineering.

He completed a Bachelor of Engineering at Azad University before pursuing his masters at the University of Kerman. Initially, he planned to specialise in oil and gas, envisioning a career as a chemical engineer in a refinery.

However, his path took an unexpected turn when his masters supervisor introduced him to a project that was focused on measuring emissions from a cement manufacturing plant.

"That was the beginning of my journey in sustainability."

He got married shortly after, and he and his wife both pursued their PhDs at the University of Malaya in Kuala Lumpur.

"For me, education has always been a way to make a real difference. Pursuing a PhD gave me the opportunity to develop solutions to critical environmental challenges while also securing a strong future for my family."

After completing his doctorate, Saeid made another major move – this time to Aotearoa New Zealand.

With his wife six months pregnant, the couple packed up and relocated to Rotorua, where Saeid took on a postdoctoral role at the Crown Research Institute Scion. There, he worked on a technology called Terax, which transforms sewage into value-added products to help reduce waste.

"The beauty of working here is being around passionate students and colleagues who share the same goals."

– Professor Saeid Baroutian

It was during this time that he gained valuable experience in developing and scaling up a technology, taking it from the lab to commercialisation while navigating all the complexities involved. These skills would later prove essential in his own start-up ventures.

He had also been collaborating with Professor Brent Young in the Faculty of Engineering and Design, which paved the way for a move to the University of Auckland in 2014 for a new postdoctoral position.

The role opened new opportunities to teach and apply for research grants, and in 2017 he took a job as a senior lecturer in the Department of Chemical and Materials Engineering.

He hasn't looked back.

Since joining the University, Saeid has accumulated numerous accolades, including the University of Auckland Early Career Research Excellence Award 2018, the Research Impact Award 2024, and the IChemE Global Sustainability Award 2024, which the CIRCUIT team won in collaboration with Enviro NZ for their work advancing sustainability in landfills.

Saeid also received the Australian and New Zealand Federation of Chemical Engineers Award of Excellence for Student Experience and Development. The award recognised his development of the Master of Sustainable Resource Recovery programme, which equips future engineers with skills in innovative waste management for environmental benefit.

"The University of Auckland is home for me. I think the most important thing is having the right people around you, and I'm lucky enough to have fantastic people around me from the entire University who are very supportive.

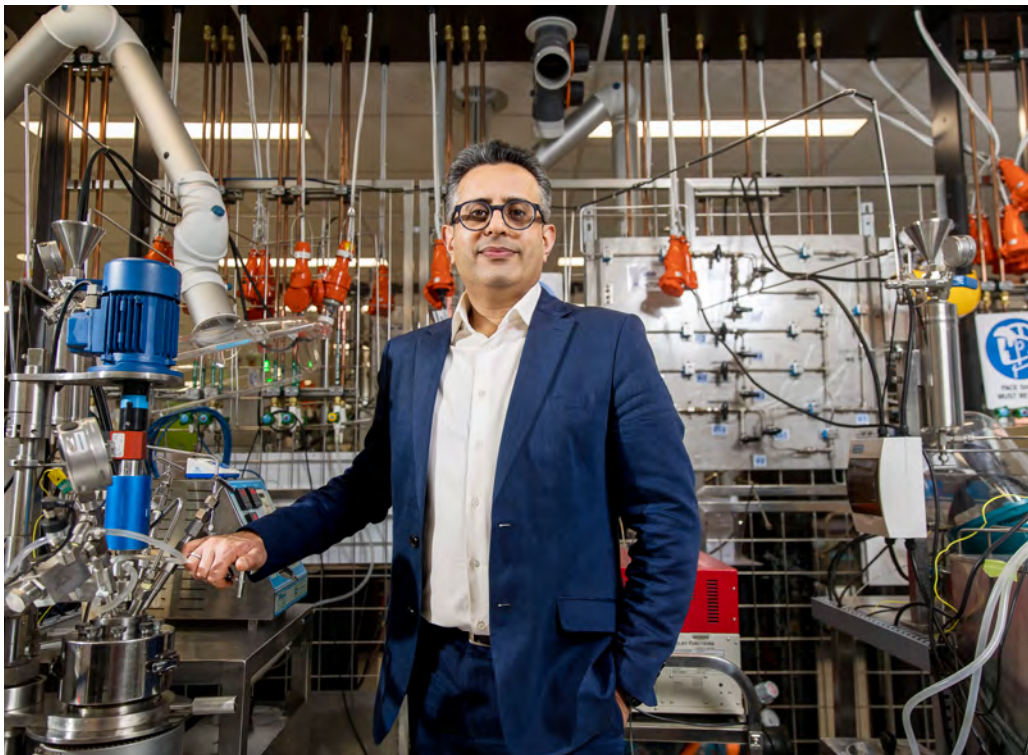
"The beauty of working here is being around passionate students and colleagues who share the same goals."

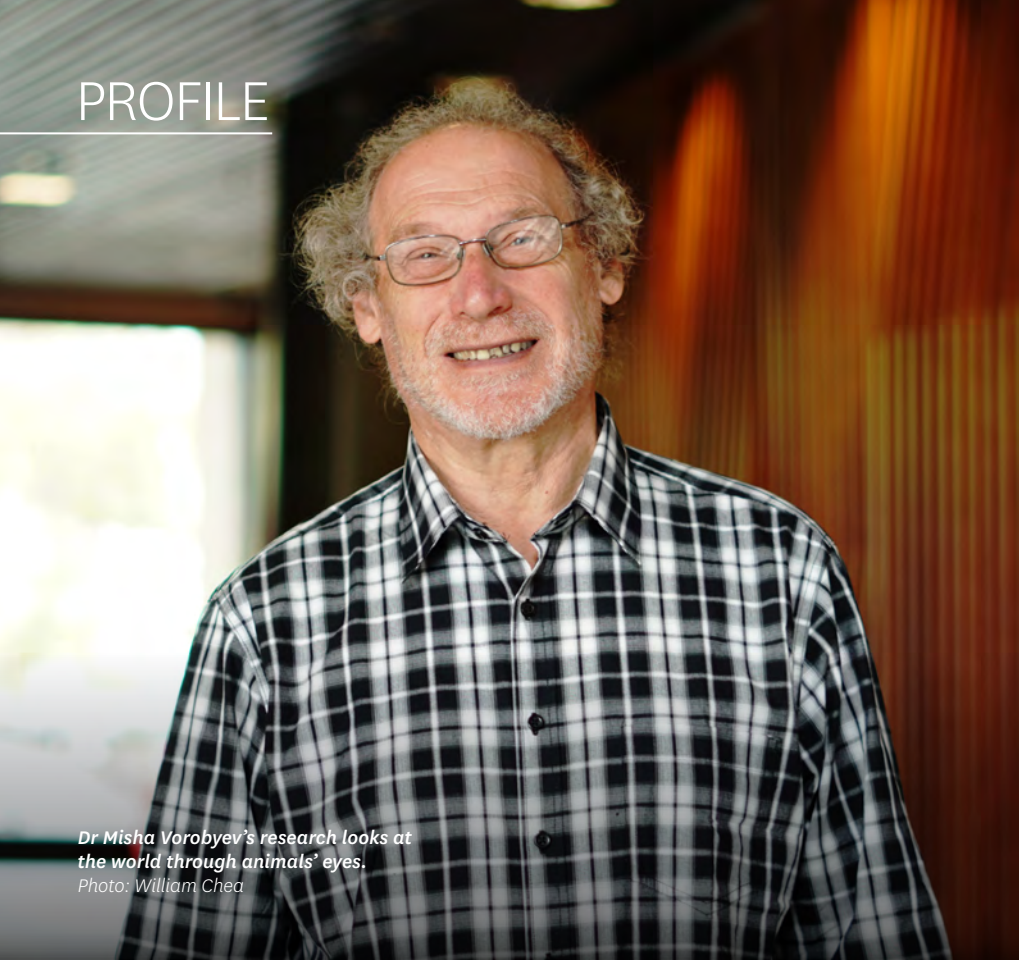
Despite being pulled in many different directions, Saeid remains as passionate about teaching as ever. His office walls are adorned with photos of his students, and his coffee mug proudly displays a picture of him with his team.

"I've received a lot of support from my colleagues," he says.

"Now it's time to pay it forward."

■ Hussein Moses





Dr Misha Vorobyev's research looks at the world through animals' eyes.
Photo: William Chea

MISHA VOROBYEV: IN LIVING COLOUR

From flowers to frogs, how and what the natural world communicates through colour is a focus for animal vision expert Dr Misha Vorobyev.

What role does the colour of flowers play in attracting bees?

How does an octopus, which is colour blind, so skilfully change its colour to camouflage with its environment? What do the fish of the Great Barrier Reef communicate to others through their vibrant colours?

These are some of the questions Dr Misha Vorobyev has posed through his research over the decades into animal vision, particularly how animals see colour.

The research has taken him from Germany to the US, Australia and now New Zealand, where current research projects include deciphering the emotional code of colours in the human brain, and reducing bycatch in the fishing industry by illuminating and changing the colour of fishing nets.

The senior lecturer in Optometry and Vision Science traces his fascination with the colourful natural world back to his childhood in Russia, where he would accompany his father, a molecular biologist, on field trips.

"I loved seeing different animals and beautiful flowers, and I wanted to become a biologist myself. But I was told that to be a biologist in the modern world, it was better to first study either physics or chemistry, which I did."

He completed a PhD in physics and maths, but his fascination with the beauty of the natural world persisted. He put together a research proposal, which harnessed his skills in calculation, to study the relationship between the colours of flowers and the colour vision of bees.

That research, undertaken in Germany on a Humboldt Research Fellowship, explored whether colour vision in bees had specifically evolved to seek out flowers. The answer, he says, was no. Instead, the research found that flowers adapted their colours to maximise their attractiveness to bees' pre-existing colour vision.

Misha says probably his best-known contribution to the field of colour vision relates to findings on primates, made while also living in Germany. The research he explains, set out to understand why humans and other closely related primates have three types of photoreceptors – different channels for conveying colour information – while most other mammals only have two.

This third photoreceptor, he explains, appeared due to a gene mutation but it was unclear why the mutation was retained. Misha and his research colleagues theorised, and ultimately showed, that this third photoreceptor was the best at detecting fruit, an important primate food source, against foliage.

Colour and how it's perceived in the animal world serves a broad range of functions, explains Misha. For example, while in the US, one of his research projects looked at the role of the colour of the beautiful but deadly poison dart frog, which in the wild can contain enough poison to kill dozens of people. The frogs' stunning colours serve as a warning sign to birds, signalling that they should not be eaten due to their poison; on the other hand, the colours compel fellow frogs, signalling their attractiveness to potential mates.

Research on Great Barrier Reef fish while in Australia similarly showed their bright colours served to camouflage them from predators and attract mates.

"There's so much beauty and mystery in the natural world."

– Dr Misha Vorobyev

He made the move across the Tasman to New Zealand in 2007, joining the School of Optometry and Vision Science. He admits he misses some of the wildlife of Australia, however he's still found opportunities to get involved in some fascinating research.

This includes investigating the mechanisms by which an octopus so skillfully changes its colour to camouflage in its environment when it is actually colour blind. Investigations have shown that the creature's ability to detect the polarisation of light, which humans can't, may be at play, he explains.

He's also exploring research into how adjusting the illumination of fishing gear using AI may reduce fishing industry bycatch. Different coloured lights can attract some species while repelling others, as can adjusting the brightness and strobing of lights, he says.

Research into which combinations can both attract target species while repelling bycatch and reducing injury to marine mammals and penguins could benefit the fishing industry and create better environmental outcomes, he adds.

Ultimately, he says, the appreciation of the natural world that first compelled him into the field is still a driver: "I love animals, I love the beautiful things around us," he says.

"There's so much beauty and mystery in the natural world."

■ Caitlin Sykes

PRIDE OF PLACE

AUSA president Gabriel Boyd talks about why he stood for the role and what he hopes to achieve.

How did you come to study at the University?
I'm born and raised in America, but my dad is from New Zealand. The schools I was looking at attending in America were out of my price range, even with scholarships. So, in January 2021, I got through the Covid barrier with my New Zealand passport, and I've been here ever since, just absolutely loving it.

What are you studying?
I've changed my degree about 27 times, but I've settled on politics, psychology and conjoining that with communications. I've got three classes to go, then I'm hoping to do postgraduate study in psychology.

What motivated you to run for the AUSA presidency?
In my third year I studied abroad for a semester at the University of Virginia. I got that 'university experience' of going to sports games where everyone's wearing the merch, and students were not just showing up in person for lectures but enjoying being there. There was a real sense that people were proud of the school they were going to.

When I came back here, though, I was aware that you don't see that same sense of pride in the student body. But there's no reason not to be proud of the University of Auckland. It's ranked 65th globally, obviously top in New Zealand, so this notion that people are just going here because they're local is preposterous. There are so many international students who come here because of this University's incredible reputation.

So, I was thinking and talking about all this when one of my good friends, Jade Butler, who was last year's engagement vice-president of the AUSA, said, 'you should check out running for president'. So, I did, and here we are.

How do you plan to inject more of that 'university experience' here?
From day one, I enacted an open-door policy at AUSA to make it more welcoming. I've also opened new social media channels where I talk directly to the student body about what we're doing as an association to enhance their experience.

A big part of my campaign was bringing live music to campus, particularly student bands. We brought some into O'Week, which was exciting, because that not only gives them a platform, but they're bringing their friends along. We're also trying to implement some live music at Shadows.

AUSA President Gabriel Boyd (centre) with Hon Chris Bishop and Vice-Chancellor Professor Dawn Freshwater at the opening of Hiwa.
Photo: Dean Carruthers

Engaging with the clubs we have on campus in a deeper way and bringing them together for the different themed weeks that we have throughout the year is another focus.

And then I've just been staying front and centre, advertising AUSA and what we do wherever I can. As a representative of the student body, I'm going to different University of Auckland events, trying to get the crowd into it and setting that precedent.

How do you explain what AUSA is about to new students?
AUSA has three core pillars. The first is student experience, which is what we've been talking about and what I'm bullish about improving.

Second is student voice. That's representing the collective student body to the media, government, the vice-chancellor and other relevant stakeholders. That's a two-fold process: taking in feedback from our faculty representatives in the student council, as well as through class reps and students coming into the AUSA office and giving us feedback; and then making sure those voices are heard. That's fighting for what students want, whether that's lobbying for more affordable public transport, or other services that would benefit student life on campus.

Third is student support. We have a welfare representative on our team who spearheads a lot of that, but we also have advisory services that are entirely independent of the University and completely confidential.

It sounds busy. What does your typical day look like?
It starts at the gym, where I get in a workout from 7–9am, which I need for my focus.

Then from 9am I'm at the AUSA office, sorting emails, and attending meetings, including for committees that I'm a part of. That's the bulk of my day.

One of the coolest parts about being AUSA president is leading a team in your vision. So, you need to set good goals and have a clear direction.

■ Caitlin Sykes

WILD AT HEART

There's surprising biodiversity on our City Campus, even in the middle of our biggest city – and it needs to be celebrated and protected, says Associate Professor Bruce Burns.

Associate Professor Bruce Burns began a citizen science initiative in 2018 that has since identified more than 1,300 different species living on the City Campus.
Photos: William Chea

In 1945, on one of the Three Kings Islands, north of Cape Reinga, Professor Geoff Baylis found the world's loneliest tree.

The island's vegetation had been ravaged by goats, but on an inaccessible slope, the botanist discovered the very last *Pennantia baylisiana*.

Today that tree, also known as the Three Kings kaikōmako and for many years as the world's rarest tree, thrives in a small garden on the City Campus alongside other plants endemic to New Zealand's northern offshore islands.

Plant ecologist Bruce Burns, an associate professor in the School of Biological Sciences, explains that although cuttings were successfully grown from that sole female *Pennantia baylisiana* in the 1950s, it was not until 1985 that a specimen was induced to self-pollinate and produce seeds – ultimately bringing the species back from the brink of extinction.

The tree is one of many rare, historic or otherwise interesting plants on the City Campus, which is home to a remarkable collection of biodiversity.

In 2018, Bruce kicked off a citizen science initiative that allows anyone to upload their observations of different species on campus to a website, to document the area's biodiversity.

At the time of writing, 3,794 observations had been made by 392 observers identifying 1,321 different species – from plants and insects to fungi and birds.

"It really is a green oasis in the middle of the city, so we should be looking after it," says Bruce.

"That means the University needs to think about how it's approaching its responsibilities to biodiversity maintenance and how we protect and enhance the amazing collection of species we already have here."

As part of its biodiversity efforts, the University is a member of the Nature Positive Universities network, which aims to harness the power and influence of universities to lead biodiversity-promoting work in their communities.

Bruce regularly uses the grounds around Old Government House for teaching and research, and he has a mine of fascinating stories to go along with the variety of specimens that grow there.

Another extremely rare tree, growing alongside the Biology building, is a *Metrosideros bartlettii* (rātā moehau) – a species endemic to the Far North that has been ravaged by possums to the point of just 14 examples surviving in the wild. Related to the pōhutukawa, it's also rare among its red-flowering relatives for having white flowers, says Bruce.

Plants on the City Campus grounds also tell the story of the area's history. Pre-1840, the area in front of where Old Government House now stands was a potato field. It was bordered on the north by a flax colony in an area where the flax still grows today.

A huge *Erythrina afra* (coast coral tree) in front of Old Government House has stood sentinel since it was planted there by Governor George Grey in the early 1860s – a specimen he brought to New Zealand from his travels in Africa. While it has recently undergone some 'surgery' by arborists to improve its overall health, Bruce

A rare Metrosideros bartlettii (rātā moehau) grows alongside the Biology building.

The coast coral tree, photographed prior to its recent trim.

The Turkish pine that grows next to Maclaurin Chapel.

notes it will grow back and, hopefully, be a feature of the grounds for many more years.

All the area's trees, however, are dwarfed by a 50-metre Norfolk pine, which was planted in 1869 by Queen Victoria's second son, Prince Alfred, alongside a giant sequoia. Dignitaries ranging from Queen Elizabeth II to Sir Edmund Hillary, and successive vice-chancellors are among other notable figures who have planted trees on the grounds.

Then there are those trees that are just plain interesting.

There's the candle nut tree, whose nuts, as the name suggests, can be cracked open and used as a candle by lighting its oil. Or the *Ficus religiosa*, or sacred fig – the species under which Buddha is said to have received enlightenment, and is considered sacred in three further religions. Or the *Camptotheca acuminata*, known as the happy tree, whose bark is the source of a compound used in many anticancer drugs.

There's also the Turkish pine that grows next to Maclaurin Chapel, which descends from the sole pine that once grew on the site of the Battle of Lone Pine in Gallipoli. Its position is particularly poignant, says Bruce, given the chapel was built in memory of pilot Lt Richard Maclaurin Goodfellow, who was killed in World War II.

But Bruce's favourite among all the weird and wonderful plants on the City Campus remains the *Pennantia baylisiana*. Bruce met Geoff Baylis, but also knew Ross Beever, the scientist who obtained viable seed from the plant in 1985 helping ensure the survival of the species.

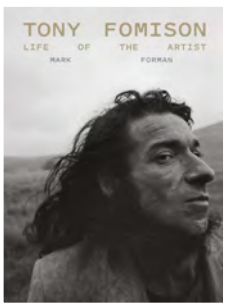
It's a reminder, he says, of the interdependence of plants and people.

"The big picture is that the biodiversity of species in an ecosystem strongly links to the health of that ecosystem and, given our lives depend on our ecosystems – for food, medicines, clean water and soil and so on – biodiversity is something that deserves our attention."

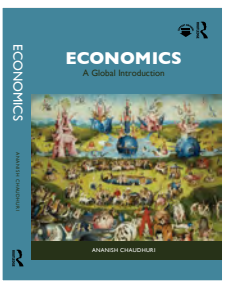
For more on the citizen science project, visit: inaturalist.nz/projects/biota-of-university-of-auckland-city-campus

■ Caitlin Sykes

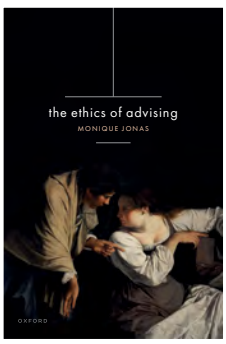
BOOKS



Tony Fomison: Life of the Artist
This biography was developed over a decade by Onehunga-based writer Mark Forman, and delves into the story of Tony Fomison, one of New Zealand's most-influential 20th century artists. Drawing on archival material and interviews with more than 150 people, the book is described as a comprehensive, yet lively and accessible biography.
Mark Forman, Auckland University Press, $60



Economics: A Global Introduction
Business School Professor of Experimental Economics Ananish Chaudhuri has written this introduction to the basics of economics. Drawing on real-world examples, it includes applications of economic principles, and insights from behavioural economics into contemporary issues such as global warming and the Covid-19 pandemic.
Ananish Chaudhuri, Routledge, $80



The Ethics of Advising
In this book, Monique Jonas addresses the ethics of something we give and receive every day: advice. An associate professor of ethics in the School of Population Health, Monique explores our ethical expectations of advice, common concerns about advising, and offers guidance across the many professional and personal contexts in which advice is given and received.
Monique Jonas, Oxford University Press, $118 (hard copy/Kindle)

A SECRET GARDEN

Within the walls of the Thomas Building, home to the School of Biological Sciences, is a hidden oasis.

The 1968 concrete building has a large central atrium, with a lush subtropical garden that's home to towering palms, unusual plants and even a fishpond. The building is located within the wider Conservation Area of the City Campus – a 41,500 square metre precinct that's home to more than 400 mature trees.

Jason Paulger oversees the many outdoor spaces around the University's campuses as its grounds and precinct manager, and the Thomas Building atrium, he says, is a favourite spot.

Jason says his passion for plants emerged at around age seven. He later began channelling a creative streak into flower arranging, discovering he could arrange flowers like a pro from age 12, and going on to master the Japanese art of Sogetsu ikebana.

It's a background that he says has further developed over his career in horticulture, working in many landscape gardener roles, into a deep appreciation of the shapes and colours that occur in nature.

The Thomas Building's lush, hidden atrium is a favourite spot for the University's grounds and precinct manager, Jason Paulger.
Photos: William Chea

How did you come to this role, overseeing the grounds at the University?

I always aspired to work at the University, and I regret that I didn't apply 16 years ago when I first saw this position come up. But when I saw the role was vacant again in 2023, I jumped at the opportunity. There is a huge portfolio of grounds, which not only encompasses the garden and turf areas, but everything outside of the buildings, including the hardscapes.

It's a lot to manage, but it's my dream job. I love having the ability to bring out the perfection of all the plants and the gardens and having the ability to make choices that enhance the environment for students.

The University has many lovely gardens. What do you particularly like about this one?

I love this space because it's quite hidden. You can't see it from the outside, so it's like a secret garden.

The walls surrounding the plants create a little microclimate for them to thrive. The style of the building also goes hand in hand with the shape and form of the plants, which are large, bold and have an artistic quality. There are palms, cycads, lilies; the greenery comes together like an abstract painting.

My background in ikebana and Western flower design helps me to appreciate all the plant life that I come across every day. There's a line and a boldness, along with a variety of leaf textures, flower colours and shades of green that you only see within a garden of this size and type.

What are some of your favourite plants in the garden?

My favorite is the black bat flower, *Tacca chantrieri*, which is from the tropical rainforests of Thailand. These plants have an architectural look about them; the boldness and the line and the shape of the leaves are all very attractive. And the flower really does look like a bat – it's quite incredible.

Another favourite is the tractor seat plant, *Ligularia reniformis*. It has big, glossy, round leaves that work well with the overall tropical design of the garden. It requires a lot of water, but it also has very attractive yellow flowers, coloured the shade of a buttercup, which grow on a long stem.

The large banana palms are also a feature. I think people could be surprised to learn bananas grow on campus.

We actually have lots of different clumps of banana trees around the University grounds, including some from the 19th century.

There's one here that's ready to be harvested. We just chop it off at the top of the stem, put the bananas in a dark place, and they ripen naturally. What I'm not sure many people know, though, is that you can also eat the banana flower (pictured above, bottom right).

■ Caitlin Sykes