

Sustainable Development Goals

Report 2025/2026

Waipapa Taumata Rau
University of Auckland

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“**Ka mua, ka muri**
Walking backwards into the future”

Cover photo: nesting gannets at Muriwai, Auckland. In addition to the onshore wave pattern, these gannets are each sitting facing their local wind flow, in effect forming a vector diagram of that flow through the colony.

Taken by Emeritus Professor John Montgomery, this photo was the winner in the Aotearoa New Zealand category of the People’s Choice Award for the Ngā Ara Whetū Kori Exhibition 2026.

Foreword

Tēnā koutou katoa,

The Māori whakataukī *ka mua, ka muri* expresses the idea that as we navigate the future, we keep our eyes on the past. Our understanding of the challenges we face, and our search for solutions, are strengthened by the knowledge, experience and wisdom of those who have come before us.

Addressing challenges such as climate change, biodiversity loss, economic inequity and social polarisation requires new ideas and innovation. But progress doesn’t always begin with the latest technology or discovery. We are also guided by generations of knowledge and the enduring principles of stewardship, collective responsibility and long-term thinking.

At Waipapa Taumata Rau, University of Auckland[1], we have unique opportunities to learn from mātauranga Māori and diverse Pacific Indigenous knowledge systems, and from the communities who hold them. These ways of thinking about our world offer important lessons about guardianship, relationships, resilience and our responsibilities to future generations. These perspectives deepen our understanding of sustainability and help inform the choices we make today.

Sustainability is a long-term commitment for our University, built on the collective efforts of many people over many years. I am pleased to share this year’s Sustainable Development Goals report and to acknowledge our staff, students, alumni and partners across education, research, engagement and campus operations. Their efforts reflect both the progress we have made and the responsibility we share to keep moving forward.

By keeping the past in view, while remaining open to new ideas and discoveries, we can help create a more sustainable future for Aotearoa New Zealand and beyond.

Nāku iti nei, nā

Professor Nic Smith
Vice-Chancellor



1. Waipapa Taumata Rau is the Māori name gifted to the University of Auckland by Ngāti Whātua Ōrākei, the Indigenous custodians of the land on which the University’s main campuses are located.



Dr Eileen Joy, Facutly of Arts and Education

Sustainable Development Goal 1

End poverty in all its forms everywhere



Research publications in 2025	
40	Number of University of Auckland publications
31%	Share of New Zealand papers

Research/funding

Are we counting on the right evidence?

Dr Eileen Joy's research, supported by the Mana Tūāpapa Future Leader Fellowship, critically examined the dominance of Western scientific evidence in shaping social policy in Aotearoa. Her work highlighted how current policy frameworks often rely on overseas data and quantitative metrics that fail to reflect the lived realities of local communities, particularly Māori. This reliance on narrow definitions of evidence marginalises Indigenous knowledge systems, which offer rich, context-specific insights, but can often be excluded due to rigid scientific hierarchies.

Joy argues that the prevailing 'gold standard' approach to evidence – often rooted in randomised control trials and statistical modelling – can obscure the social, cultural and relational dimensions of well-being. She calls for a broader, more inclusive understanding of evidence that values narrative and experiential and place-based knowledge.

Her research advocates for policy development that is culturally responsive and grounded in local realities, rather than imported models that may not align with community needs. It also explores how the privileging of Western methodologies can perpetuate systemic inequities, particularly when policies are designed without meaningful engagement with Māori and other marginalised groups. Joy's work is a call to action for policymakers, researchers and institutions to rethink how evidence is defined, collected and applied.

Research/funding

Economists urge action to prevent 'AI poverty traps'

University of Auckland economists Dr Asha Sundaram and Dr Dennis Wesselbaum have raised concerns that artificial intelligence (AI) could entrench global inequality if developing nations are excluded from its benefits. Their research identified the risk of "AI poverty traps," where countries with limited digital infrastructure and innovation capacity become reliant on foreign technologies, stifling local economic development and reinforcing dependency.

Without targeted policy intervention, AI could exacerbate existing disparities. Countries lacking the resources to invest in AI may miss out on productivity gains, while wealthier nations accelerate ahead. The researchers proposed a multi-pronged approach to mitigate these risks, including international financial support, robust legal frameworks, and investment in local innovation ecosystems. They also advocated for inclusive governance structures that ensure equitable access to AI technologies and their economic benefits.

Their study suggested that traditional aid models are ill-equipped to address the structural challenges posed by AI. Instead, the authors recommended mechanisms such as international tax regimes to redistribute AI-generated wealth and support capacity-building in lower-income nations. They emphasise that AI is not solely a technological issue, but also a socio-economic one that demands coordinated global action.



Dr Asha Sundaram

Research/funding

How can we get our children back to school?

A University of Auckland report, drawing on responses from the Growing Up in New Zealand longitudinal study and part of the Our Voices project, explored the complex issue of declining school attendance in Aotearoa. Researchers found that students are more likely to attend school when they feel less stressed, have meaningful relationships and perceive their learning as relevant to their lives.

Dr Georgia Rudd, one of the lead researchers, emphasised that absenteeism is not simply a behavioural issue but is often rooted in broader social and economic conditions. The report highlighted that students from low-income households face additional barriers to attendance, including financial stress, unstable housing, and limited access to resources such as transport, technology and school supplies. These challenges can lead to disengagement and a sense of alienation from the education system.

Our Voices is aimed at better understanding what young people in Aotearoa need to thrive, in order to inform policies and services aimed at supporting their well-being.

Data Snapshot



Students from public schools that are deciles 1, 2 and 3 (2025)

6,619

22%

30,083
Total number of domestic students*

** Equivalent full-time students*

Research/funding

Pacific home ownership plummets: 'Something needs to change'

Research by Dr Karamia Müller revealed a stark and worsening disparity in home ownership rates among Pacific peoples in Aotearoa, with only 16.8 percent owning homes compared to the national average of 42.1 percent. This "heartbreaking" drop is attributed to systemic financial barriers, including low incomes, limited access to capital and a lack of intergenerational wealth. These challenges are compounded by poor rental housing conditions, which have been linked to serious health issues disproportionately affecting Pacific communities.

Müller argued that current housing policies fail to address the cultural and economic realities of Pacific families. She advocated for urgent government intervention, including incentives for culturally appropriate affordable housing and support for community-led development. Her research highlighted the potential of co-housing models and collective ownership structures that align with Pacific values of family and community.

Müller emphasised the resilience, resourcefulness, and collective strength within Pacific communities and was critical of deficit-based narratives that frame Pacific peoples as passive recipients of aid. She called for a shift in policy, as well as public discourse that centres Pacific voices and leadership in housing solutions.

Research/funding

Call for more compassion in delivery of services for the homeless

Master of Social and Community Leadership graduate Sophie Scott-Elvidge explored the lives of homeless people with pet dogs in her powerful and compassionate thesis. Her research highlighted the emotional depth and practical complexities of these relationships, revealing how pets offer companionship, emotional support, and a sense of stability in otherwise precarious circumstances.

Scott-Elvidge's findings also exposed a significant gap in housing and social services. Many shelters and transitional housing programmes do not accommodate animals, leaving pet owners with few viable options. This often forces individuals to choose between accessing shelter or staying with their pets and remaining on the streets to avoid separation. Her thesis argued that such policies overlook the importance of the human-animal bond and fail to meet the holistic needs of those experiencing homelessness. It presented the case for more inclusive housing policies that recognise pets as part of people's whānau.



Sophie Scott-Elvidge

Research/funding

Covid strategies 'fell short' for Pacific people in NZ

Research led by Professor Sir Collin Tukuitonga, co-director of Te Poutoko Ora a Kiwa – Centre for Pacific and Global Health, has revealed that New Zealand's pandemic response failed to adequately meet the needs of Pacific communities. It highlighted how New Zealand's "one size fits all" approach to the Covid pandemic overlooked the structural and cultural realities faced by Pacific peoples, resulting in disproportionately high rates of hospitalisation and mortality.

Economic hardship was a significant theme of the research. Many Pacific families experienced job losses, reduced income and financial instability during lockdowns. Other contributing factors included overcrowded housing, pre-existing health conditions and limited access to healthcare services. These pressures were compounded by difficulties in being able to utilise digital tools, which disrupted education for Pacific students and widened existing inequalities.

Research/funding

Vape shops clustered around schools

Research led by medical student Ronan Payinda revealed that nearly half of New Zealand schools are within walking distance of specialist vape stores, despite legislation intended to prevent this. The study found 44 percent of schools have a vape shop within one kilometre, and 13 percent within 300 metres.

The researchers found inequity in the location of vape stores, with proximity to schools highest in low-income communities. Among the most affluent fifth of schools, seven percent had a specialist vape store within a 300-metre radius. Among the poorest quintile, 40 percent of schools had a specialist vape store within 300 metres.

The study calls for stronger regulation and better protections for young people.

Student support

Winter Warmer Clothes Drive

The Winter Warmer Clothes Drive was established in 2024 as a pilot initiative and was repeated in 2025 in response to the seasonal chill and financial challenges faced by students. Led by the Health Promotion team within Student Diversity, Equity and Inclusion, this year's initiative saw a marked increase in staff donations and student uptake, likely due to more coordinated marketing and communications.

In total, staff donated 594 items of quality winter clothing, such as jumpers, pants, scarves and gloves, across nine designated drop-off locations. From these donations, 407 were distributed to 204 students across Grafton and City campuses at dedicated events. The remaining clothing was transferred to Te Tai Tokerau Campus to be included in a clothes swap event.



Students at the Winter Warmer Clothes Drive 2025



Māori traders taking pigs to Auckland. Image: Auckland Libraries Heritage Collections

Sustainable Development Goal 2

End hunger, achieve food security and improved nutrition, and promote sustainable agriculture



Research publications in 2025	
80	Number of University of Auckland publications
18%	Share of New Zealand papers

Research/funding

History of Māori gardens could hold seeds for future

Māori once grew enough fruit and vegetables to feed Auckland, yet these days many struggle to afford healthy food and experience more food insecurity than other ethnicities in Aotearoa.

University of Auckland PhD researcher Bhaveeka Madagammana, from the Māori and Pacific Housing Research Centre, documented the extensive food production systems developed by Māori in Tāmaki Makaurau between the 1820s and 1860s. His research showed that Māori cultivated more than 8,000 hectares of māra kai (food gardens), growing crops such as kumara, yams, potatoes, cabbages, pumpkins and peaches. Māori also operated more than 50 flour mills across Aotearoa and supplied settlers with food, firewood and labour.

Historical records, including settler diaries and parliamentary documents, indicate that Māori food production was essential to the survival and development of early Auckland. Settlements grew around bays where waka delivered food and where markets were held. However, this system was disrupted during the New Zealand Wars, when settlers confiscated land, destroyed villages and dismantled gardens and mills. Large-scale Māori food production declined after the 1860s, replaced by European farming. Contemporary māra kai initiatives, such as those led by Ngāti Whātua Ōrākei, aim to restore traditional gardening practices and improve food access.

Research/funding

Child cancer nutrition study earns $1.35m grant

Dr Amy Lovell, senior lecturer in nutrition at the University of Auckland, was awarded a $1.35 million Health Research Council grant to lead a national study on nutrition for children undergoing cancer treatment. Her research aims to improve outcomes for children affected by malnutrition during cancer care. Lovell's work is driven by her experience as a paediatric oncology dietitian at Starship Hospital, where she witnesses the critical role nutrition plays in patient survival and recovery.

She states that upward of 90 percent of children with cancer experience some form of malnutrition during treatment. Some children become underweight and need nasogastric feeding to help them survive cancer treatment. Being underweight can increase the risks of treatment-related toxicities in the body, which can lead to delays to chemotherapy schedules.

Families often struggle to provide nutrient-rich meals during treatment, especially when children experience nausea, mouth sores and appetite loss. These challenges are compounded by financial stress and limited access to healthy food. Lovell aims to empower families to make informed food choices that support recovery and long-term health. Her goal is to ensure that no child is disadvantaged by malnutrition during or after cancer treatment, regardless of where they live.



Dr Amy Lovell

Student support

On a mission to make healthy food affordable

A new initiative is tackling food insecurity by making nutritious food more accessible to students, staff and the wider community, with no restrictions or stigma attached.

Mission Grocer opened an outlet in Albert Park in October, offering fresh fruit and vegetables at discounted prices, just steps away from the University's City Campus.

Mission Grocer is a social enterprise developed through a collaboration between the University, Auckland City Mission and Auckland Council. It sources fresh produce from registered suppliers and offers low-cost, ready-made meals. Students and Community Services Card holders receive an additional 10 percent discount.

A 'pay it forward' system enables University staff members and other customers to purchase grocery bags or meals for those in need. Messages left by donors on a board add a personal touch that recipients appreciate.

The Kitchen Project operates from the same site, teaching students how to cook healthy meals using seasonal ingredients. Monthly classes have been running at two University halls of residence, enhancing food literacy and security.



Tee Bouttier-Esprit (left) and Kelly O'Hara

Engagement

Elders share food-gardening knowledge

An initiative led by the University of Auckland's Centre for Co-Created Ageing Research is connecting older gardeners with individuals and communities keen to learn home-food production skills. The Master Home Food Producers project aims to promote intergenerational knowledge sharing, sustainable gardening practices and community resilience.

The focus is on empowering older people by recognising and utilising their expertise in growing fruit and vegetables at home. It seeks to transfer practical skills, foster social connection and support food security by helping people cultivate their own produce. The initiative also aims to inform policy decisions by demonstrating the value of older adults' contributions to sustainable living.

Dr Tamika Simpson, research co-lead and organiser, emphasised the importance of reconnecting communities with gardening knowledge that has often been passed down through generations. She notes that many older people with valuable skills are no longer actively gardening due to various barriers, while others lack the opportunity to learn. The project intends to bridge this gap by facilitating mentorship and hands-on learning.

Dr Lisa Williams, senior research fellow in nursing and project co-lead, highlights the environmental benefits of home gardening, including reduced food miles and packaging waste. She also sees the initiative as a way to strengthen intergenerational relationships and promote well-being through shared activity.

The programme links participants to community hubs and encourages local engagement, welcoming people of all ages and backgrounds. By making gardening knowledge visible and accessible, it supports both individual and collective efforts to improve food resilience.



Dr Tamika Simpson and Dr Lisa Williams

Research/funding

Incidence of childhood trauma and screen-time rules in obesity prevention

Two University of Auckland studies, led by Dr Ladan Hashemi, highlighted the complex factors contributing to childhood obesity in Aotearoa and offered insights into prevention strategies. The first found that adverse childhood experiences (ACEs) – including abuse, parental separation and discrimination – were strongly linked to obesity, particularly among Māori, Pacific and low-income families. Children with four or more ACEs were nearly three times more likely to be obese.

Hashemi's second study examined the impact of family screen-time rules on obesity risk. Using data from over 5,700 children, researchers found that consistent rules around screen quality, quantity and timing helped reduce screen use and improve sleep – both protective factors against obesity. The study also revealed that poverty and food insecurity were significant contributors to obesity, often overshadowing the effects of screen time alone.

Together, these studies suggest that facilitating positive childhood experiences and healthy screen habits must be supported by broader policies that tackle poverty, improve access to nutritious food, and create stable, nurturing environments for children.



Dr Ladan Hashemi

Our people

The transformative power of urban food forests

Professional Teaching Fellow Daniel Kelly is pioneering the use of urban food forests to address climate change and social inequality.

Learning to garden changed Kelly and he wants to spread the seeds of that change. His journey began with a personal interest in gardening, which evolved into a broader mission during his environmental-law studies. He is researching ways to produce food without fuelling climate change.

Kelly's work, based at Papatūānuku Kōkiri marae in Māngere, integrates ecological restoration with community food resilience. His research focuses on syntropic agroforestry – a method of growing inspired by pre-modern European farming and Indigenous Brazilian practices. This technique involves planting fast-growing trees in dense rows, with vegetables and fruit trees growing in protected alleyways between. Seasonal pruning provides light and mulch, enhancing soil health and carbon sequestration.

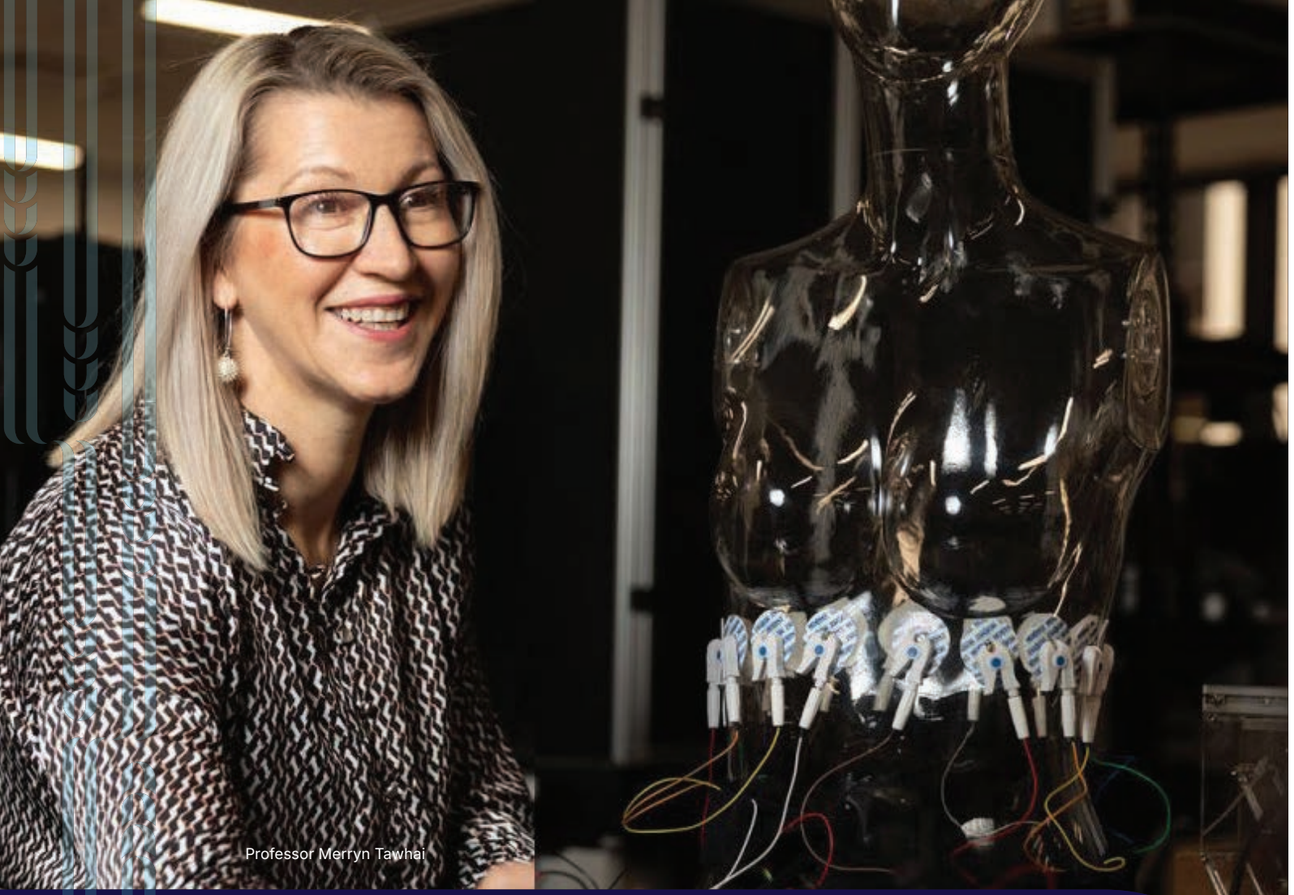
The food forest at the marae, now part of Kelly's PhD thesis, has transformed bare clay into a thriving ecosystem with 12-metre trees and a wide variety of produce, including bananas, figs and pawpaw. The bounty is distributed by the marae as part of its efforts to support people facing hunger in the community.



Daniel Kelly



Food forest at Papatūānuku Kōkiri marae



Professor Merryn Tawhai

Sustainable Development Goal 3

Ensure healthy lives and promote well-being for all at all ages



Research publications in 2025	
905	Number of University of Auckland publications
39%	Share of New Zealand papers

Research/funding

Digital twins: transforming personalised medical care

The Auckland Bioengineering Institute (ABI) is at the forefront of digital-twin technology, transforming how clinicians approach diagnosis and treatment and revolutionising personalised healthcare. Digital twins – virtual replicas of single organs or entire bodies – are sophisticated computer models that replicate the anatomy and physiology of individual patients, enabling clinicians to simulate medical scenarios and predict outcomes with greater accuracy.

This innovation is particularly impactful for complex and high-risk conditions such as chronic thromboembolic pulmonary hypertension (CTEPH), a rare but serious lung condition, where traditional diagnostic and treatment pathways often involve significant uncertainty and surgical decisions carry a high risk.

ABI researchers developed digital lung twins, virtual models built from patient-specific data including imaging, blood tests, and physiological measurements. These models allow clinicians to test surgical scenarios, helping determine whether a patient is likely to benefit from surgery.

The technology extends much more broadly. ABI is collaborating with international experts to apply digital twin technology to orthopaedics, chronic disease management and general health monitoring. For example, digital twins are being used to optimise hip implant selection and to support diabetes care through wearable devices and personalised digital health navigators. These tools integrate real-time data to provide tailored health advice, empowering patients and improving outcomes.

Research/funding

$1.4 million boost for research into childhood wheeze

A $1.4 million Health Research Council grant is supporting a major clinical trial to investigate a new oral treatment for pre-school wheeze, a condition affecting one in four New Zealand children, which sees more than 3,000 pre-schoolers admitted to hospital each year.

The trial focuses on OM-85, a medicine that can be taken as a drink. OM-85 contains several killed respiratory bacteria, which prime the immune system to fight respiratory viruses. Unlike asthma medications, which are often used despite differing underlying causes, OM-85 offers a targeted approach with fewer side effects and environmental impacts. The study will involve more than 1,000 children aged under five, across New Zealand and Australia, who have experienced repeated hospital admissions due to wheeze.

Māori children and Pacific children are disproportionately affected, with significantly higher rates of hospitalisation and re-admission. The project includes strong community engagement, particularly with kōhanga reo and primary care providers in Auckland and Waikato, to ensure culturally responsive research.

The trial aims to reduce hospital visits, antibiotic use and reliance on environmentally harmful propellant inhalers. The findings will inform a cost-benefit analysis for Pharmac to consider funding OM-85. The project also supports emerging researchers and nurses, including Māori medical students, and exemplifies a whānau-centred, equity-focused approach to child health research.



Eve, a paediatric patient, who has had multiple hospital presentations with wheeze

Research/funding

Could brain pulsatility prevent dementia?

Researchers are investigating how a brain-pressure marker could potentially signpost cognitive decline risk 20-30 years before symptoms appear. A team from the Auckland Bioengineering Institute (ABI) is investigating brain pulsatility – how blood pressure waves travel through the brain – as a potential early marker for dementia risk. Their findings suggest that abnormal pulsatility may precede the formation of amyloid proteins, which are linked to Alzheimer's disease.

The research shows that pulsatility transmission varies by individual and can be influenced by factors such as stress and high blood pressure. In a recent study, participants inhaled carbon dioxide to test how pulsatility changed, revealing that women may be more vulnerable to dysregulation – potentially explaining their higher rates of Alzheimer's.

Currently, dementia diagnosis relies on late-stage biomarkers like amyloid and tau proteins, often detected only after age 60. ABI's work aims to shift this timeline, allowing for earlier intervention through lifestyle changes or clinical treatments. If successful, the research could lead to routine MRI-based assessments for people in their 30s and 40s, positioning New Zealand as a global leader in early dementia diagnostics.

Research/funding

First child receives life-changing brain sensor

In a world-first human medical trial, a wireless sensor has been implanted into the brain of a child suffering from hydrocephalus, a condition that causes fluid build-up, to help detect a potentially life-threatening increase in brain pressure.

Hydrocephalus is typically treated with a shunt – a small silicon tube that drains excess fluid from the brain into the abdomen. However, shunts are prone to failure, especially in children. Symptoms of a blocked shunt, such as headaches and nausea, are often indistinguishable from less serious conditions, leading to frequent emergency visits and unnecessary hospitalisations.

The new sensor, which is just 20mm long and weighs 0.3 grams, is implanted next to the shunt and activated externally using a hand-held wand. It provides accurate pressure readings, helping families determine whether symptoms warrant urgent medical attention.



Wireless brain sensor and wand technology

Research/funding

Hypertension: making the silent killer audible

A research team from the University's Centre for Heart Research aims to transform the diagnosis and treatment of high blood pressure. Cardiovascular disease is New Zealand's single biggest cause of death, and its greatest risk factor is hypertension, which is asymptomatic, earning it the name "the silent killer".

The project seeks to personalise hypertension treatment through genetic screening. Despite its prevalence, hypertension is often poorly managed: half of those on medication remain hypertensive. This is largely due to the lack of individualised diagnosis – current treatments are prescribed empirically, without understanding the underlying cause in each patient.

The research team is developing a DNA-based diagnostic tool that could identify the most effective medication for each individual. This innovation would mark a significant shift from the one-size-fits-all approach and could be administered in GP clinics or at the bedside. If successful, it would be the first of its kind in the Southern Hemisphere.

Our people

Vulnerable infants and children to benefit from funding boost

Two researchers at the Auckland Bioengineering Institute (ABI) received Sir Charles Hercus Health Research Fellowships to advance paediatric health.

Dr Hamid Abbasi was awarded $600,000 to develop AI-driven tools for detecting perinatal brain injury, caused by oxygen and blood flow deprivation during birth. Affecting 50–70 newborns annually in New Zealand, this condition can lead to lifelong neurodevelopmental challenges. Abbasi's research focuses on using high-resolution EEG biomarkers and artificial intelligence to identify the timing and severity of injury within the critical six-hour "golden window" after birth. The goal is to create real-time diagnostic tools for bedside use, particularly benefiting high-risk populations such as Māori preterm infants.

Dr Julie Choisne received almost $600,000 to develop personalised biomechanical tools for paediatric orthopaedic surgery. Her work targets conditions like hip dysplasia and cerebral palsy, which cause complex bone deformities. By creating predictive models based on medical scans, surgical interventions can be personalised to each child's unique anatomy, improving outcomes and reducing long-term complications such as osteoarthritis.

Research/funding

'Natural' pacemaker trialled in humans

A world-first clinical trial is testing a "natural" pacemaker that mimics the heart's variable rhythm, offering new hope for patients with heart failure. Led by Professor Julian Paton, Director of Manaaki Manawa, the Centre for Heart Research, the project aims to replicate the heart's natural beat, which varies with respiration, rather than the steady rhythm produced by conventional pacemakers.

The trial began in Waikato Hospital and has since expanded to sites in Australia and the UK. The device is temporarily connected to patients recovering from heart surgery using pacing wires, allowing researchers to observe its effects over several days. Early results show no adverse effects and promising improvements in heart function.

Animal studies, particularly in sheep whose cardiovascular systems closely resemble humans, demonstrated that the variable pacemaker significantly improved exercise capacity and cardiac output. These findings suggest that restoring natural heart rate variability could reverse some effects of heart failure and enhance quality of life.


Professor Julian Paton

Data Snapshot



Graduates in health professions* (2025)

2,250

19%

11,766
Total graduates

**From the Faculty of Medical and Health Sciences and the Liggins Institute*

Research/funding

Zooming into the womb

A research team at the Auckland Bioengineering Institute (ABI) secured nearly $1 million in Marsden funding to investigate how foetal growth restriction may influence long-term heart health. Led by Associate Professors Alys Clark and Jo James, the project uses virtual models of the placenta and foetal heart to explore the mechanical interactions between these organs during pregnancy.

Foetal growth restriction affects around one in ten pregnancies, often going undetected until birth. These babies typically have smaller placentas with reduced blood vessel branching, which limits nutrient delivery and impacts development. Subtle changes in heart structure are also observed at birth, suggesting a link between placental function and cardiovascular outcomes.

Because clinical imaging tools cannot capture these interactions in real pregnancies, the team is using experimental data and novel imaging techniques to build computer-based models of the foetal cardiovascular system. These models aim to identify the biomechanical factors that contribute most to the development of heart conditions later in life.

The research reflects a shift toward understanding pregnancy as a complex, integrated system rather than isolated organs. It also highlights the potential of digital modelling to improve early detection and intervention strategies for at-risk pregnancies. ABI Director Professor Merryn Tawhai hailed the project as “world-leading research in pregnancy health” with the potential to positively impact many lives.



ABI Associate Professors Alys Clark (left) and Jo James are leading a team of scientists investigating how the placenta and foetus interact and the impact on the cardiovascular system

Our people

Professor Mike Dragunow: advancing brain research in Aotearoa

Professor Mike Dragunow, a leading neuropharmacologist at the University of Auckland, was recognised with both the Hercus Medal and the Marsden Medal for his outstanding contributions to brain research. His career spans over three decades of pioneering work in understanding and treating neurological disorders, including Alzheimer’s, Parkinson’s, epilepsy and brain cancers.

Dragunow’s research led to the creation of the Hugh Green Biobank, a pioneering platform that enables testing of potential medications directly on donated human brain cells. This approach is accelerating drug development for a range of neurological conditions. He also founded the Freemasons Neurosurgery Research Unit, fostering collaboration between clinicians and researchers.

His work has attracted over $55 million in research funding, produced more than 340 publications and supported 100-plus graduate students. Dragunow’s influence extends beyond the lab, with a strong focus on mentoring emerging scientists and engaging with Māori communities to ensure culturally respectful research practices. He also co-founded Neurovalida, a drug validation service supporting biotech and pharmaceutical innovation.

Born in South Dunedin to refugee parents, he has become one of New Zealand’s most respected scientists, earning multiple honours including also the Gluckman Medal and Fellowship of the Royal Society Te Apārangi.

Dragunow’s contributions have positioned New Zealand as a global leader in brain research and continue to inspire the next generation of scientists.



Professor Mike Dragunow



Te Tupu o Te Tōrea

Sustainable Development Goal 4

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4 QUALITY EDUCATION

Research publications in 2025	
173	Number of University of Auckland publications
32%	Share of New Zealand papers

Education

An award-winning start for children

Te Tupu o Te Tōrea, the University's newest early learning service, has received the 2025 Dr Darius Singh Award for Innovation from the Early Childhood Council. This national award celebrates forward-thinking approaches that create the best outcomes for children across Aotearoa, setting them up for future success.

University of Auckland staff partnered with local iwi Ngāti Whātua Ōrākei, and Smith Architects, on the design. Every part of the centre nurtures tamariki in a calm, inclusive and sustainable environment that celebrates whakapapa and whenua.

General manager of early childhood education centres, Joeline Waugh, accepted the award on behalf of the University and everyone involved in the centre's development. She described it as a career highlight, having poured 25-plus years' experience into the project.

Education

Scholarships empower Māori students in STEM

Five high-achieving Māori students were awarded the inaugural Whatumoana Paki Scholarships, supporting their studies in engineering and technology. Funded by Waste Management NZ Ltd, the scholarships provide financial assistance to students for the duration of their studies. They honour the legacy of Whatumoana Paki QSO, a respected elder of the Māori royal family.

The scholarships, totalling $480,000, were presented by Prince Whatumoana Paki Jr, who honoured his grandfather's memory, reflecting on his lifelong service to Māori communities.

"We are confident that these scholarships will find worthy recipients, rangatahi Māori who embody the spirit of ingenuity, resourcefulness and community service that Whatumoana exemplified," said Prince Whatumoana Paki Jr.

The presentation ceremony was attended by other representatives of the Kiingitanga and the University's Māori Student Association. Recipients shared aspirations to use their education to uplift their whānau, hapū, and iwi, and to increase Māori representation in STEM fields.

Education

Smashing the 'brown ceiling': Pacific professionals upskill

A new micro-credential, *Improving well-being outcomes for Pacific families*, has been developed and launched by the Faculty of Medical and Health Sciences. Now in its second year of operation, the course is part of a broader initiative to address the 'brown ceiling' – the systemic barriers that limit Pacific peoples' access to tertiary education and leadership roles.

Delivered in partnership with the Pacific Medical Association, it uses the Pacific Whānau Ora model to equip participants with culturally grounded skills for health and social service delivery. Many of its students have been undertaking university study for the first time. For them, the course provided a transformative experience, boosting confidence, professional capability, and aspirations for further study.

Associate Dean Pacific, Sir Collin Tukuitonga, emphasised the importance of accessible pathways into higher education. The initiative also supports the development of the Knowledge Hub, a strategic platform to enhance Pacific health outcomes across Aotearoa and the Pacific region.



Whatumoana Paki Scholarship recipients

Data Snapshot

New students whose parents did not hold a university degree (2025)

3,178

36%

8,850
Total number of students* starting a degree

** Equivalent full-time students*

Overall satisfaction with the quality of programme (2025)

4,820

79%

6,144
Total number of respondents

Education

Climate scenarios project wins Green Gown award

A collaborative project on the impact of climate change on the New Zealand tertiary education sector has been awarded a 2024 Green Gown Award.

The Climate Scenarios project, led by the NZ Tertiary Education Sector Futures Group, explored how climate change could impact Aotearoa's tertiary education sector through to the end of the 21st century.

Scenario-planning workshops were held concurrently in five locations across Aotearoa. More than 100 participants attended – including university staff, student leaders, iwi, local and central government, and civil society representatives. These sessions examined potential drivers of change such as student demographics, learning formats, and institutional roles under varying climate futures. The result was a set of four plausible scenarios to guide climate adaptation planning within the sector.

The University played a key role, co-hosting the Auckland workshops and contributing staff from multiple departments. The project underscores the importance of cross-sector collaboration in addressing global challenges and preparing institutions for climate resilience.



Little Labs founder Laura Torpey

Education

Little Labs: making science accessible for rural primary school kids

Little Labs is a grass-roots science education initiative founded by Laura Torpey, a University of Auckland biomedical science graduate. Motivated by her own experience growing up in rural New Zealand, with limited access to science education, Torpey launched the programme to bring hands-on, engaging science learning to tamariki in Years 1–8 across rural communities.

The programme runs for nearly a full school year and includes career-focused sessions for older students. It is designed to accommodate diverse learning styles – auditory, visual, reading and writing, and kinaesthetic – through a mix of group discussions, multimedia presentations, and tactile activities. Students interact with specimens such as shark jaws, fossils and insects, and are encouraged to explore science through humour and storytelling. The goal is to demystify science and make it fun, relevant, and confidence-building.

Torpey's journey from a casual idea to a registered charity was accelerated by her involvement in the Centre for Innovation and Entrepreneurship's Velocity programme, which helped her refine her business model and pitch. Little Labs now receives funding from organisations such as the Wright Family Foundation, FMG Insurance and MBIE's Sector Workforce Engagement Programme. These contributions support teaching materials, transport and end-of-year science expos.

Last year, Torpey was recognised with a Service and Leadership award at the University's Blues Awards, acknowledging her impact on education and community engagement. Her long-term vision is to expand Little Labs.

Education

Active bodies, active minds

The University of Auckland's new recreation centre, Hiwa, is redefining student well-being and demonstrating a strong link between physical activity and academic performance. Opened in late 2024, Hiwa is a purpose-built, eight-level facility designed to support physical, mental and social health. Its name, gifted by Ngāti Whātua Ōrākei, reflects aspirations for vitality and growth.

Research by the University's Campus Life team shows a strong correlation between physical activity and academic performance. Students who visited Hiwa just once a week achieved 19 percent more A grades, with Māori students and Pacific students seeing even greater gains – 24 percent and 44 percent respectively. Those who averaged three times a week got 30 percent more A grades. These findings have informed broader initiatives such as Ako, a Pacific-based study community, and Toitū Tauira Māori, which integrates academic and pastoral care.

Hiwa was designed with equity and accessibility in mind, providing inclusive environments for all students, including those with mental health challenges or disabilities. Around 30 percent of the centre is dedicated to restorative environments, recognising the growing need for decompression and emotional support among students.

Hiwa exemplifies how physical activity, community, and inclusive design can enhance educational outcomes. It is more than a fitness centre – it is a statement of the University's commitment to holistic student success.





Professor Yvonne Underhill-Sem

Sustainable Development Goal 5

Achieve gender equality and empower all women and girls



Research publications in 2025	
88	Number of University of Auckland publications
31%	Share of New Zealand papers

Our people

Audacious voice for women in the Pacific

Pacific feminist scholar, Professor Yvonne Underhill-Sem MNZM, has been a trailblazer in the fields of development and Pacific studies at the University of Auckland. Her work explores how power operates – particularly how environmental, social, cultural and economic systems affect women in the Pacific.

In her inaugural lecture, she introduced the concept of the 'Melia Effect', named after her niece Melia, whose preventable death in Papua New Guinea (due to untreated menstrual health issues) became a catalyst for much of Underhill-Sem's later scholarship.

Underhill-Sem uses this tragedy to highlight the urgent need for intersectional, gender-aware responses to development challenges in the Pacific, especially those that centre Indigenous knowledge and lived experience.

Her academic and advocacy career spans teaching in Papua New Guinea, working in Brussels and two decades in Auckland's Development Studies programme. She has also been deeply involved in global feminist networks such as DAWN (Development Alternatives with Women for a New Era) and AWID (Association for Women's Rights in Development), and continues to contribute to organisations like OXFAM Pacific and the Pacific Feminist Fund.

Underhill-Sem's work is deeply personal, politically engaged and unapologetically feminist. She is committed to amplifying Pacific women's voices, challenging structural inequalities and ensuring that feminist values are embedded in governance and development practice.

Our people

A mother's struggle, a daughter's mission

Diabetic women are twice as likely to get heart disease than diabetic men, but most research focuses on men. After her mother was diagnosed with type 2, Maryam Rahmani decided to change that.

Rahmani, a PhD candidate at the Auckland Bioengineering Institute, is driven by a personal mission to improve health outcomes for women with diabetes – an ambition shaped by her mum Leila's experience. Witnessing her mother's suffering, and the lack of tailored care for women, inspired Rahmani to pursue biomedical research.

Originally trained in electrical engineering, Rahmani transitioned into biomedical science to explore how diabetes affects the heart, particularly in women. Her research focuses on the microscopic mechanics of heart muscle fibres and has uncovered gender-specific differences in how diabetes impairs cardiac function. While male hearts showed reduced calcium cycling efficiency, female hearts exhibited dysfunction in the crossbridge domain – critical for muscle contraction.

Rahmani's findings challenge the male-centric models that dominate medical research and highlight the need for gender-specific diagnostics and treatments. She hopes her work will lead to more equitable healthcare and better outcomes for women.

Our people

Award-winning law teacher follows in family footsteps

Faculty of Law lecturer Dr Suliana Mone draws on her family's heritage as educators to help inspire the next generation of legal minds. Last year, she was recognised with an Excellence in Teaching Award for her outstanding contributions to legal education. Mone is known for her culturally responsive teaching style and her commitment to supporting Māori students and Pacific students in navigating the legal system.

As well as teaching, Mone is also Assistant Associate Dean Moana Oceania. Her research encompasses international law, human rights, women's rights and Pacific law. She is especially focused on exploring the resistance to adopting the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in the Kingdom of Tonga.

Mone integrates Pacific values and perspectives into her teaching, encouraging students to think critically about the law's role in society and its impact on marginalised communities.

Data Snapshot

Female graduates by broad subject area* (2025)

7,070

60%

11,766
Total graduates by broad subject area

**STEM, Medicine, Arts and Humanities, Social Sciences*

Operations

Gender Action Plan group

The Gender Action Plan (GAP) group has been established to guide the University's first Gender Equity Strategy and Plan, bringing together staff and student representatives with lived experience and expertise in gender-related inequities. Formed in response to findings from the University's Gender Pay Gap reports, the group collaborates with the Office of the Pro Vice-Chancellor Equity and Human Resources' Diversity, Equity, and Inclusion team, to turn data into actionable change.

Members represent diverse communities and share personal experiences of systemic barriers to gender equity. Progress includes developing a draft framework and actionable steps, such as transparent salary negotiations and clearer career pathways. The group is now prioritising these actions in collaboration with Human Resources to ensure they address real challenges. This work will culminate in the release of the University's Gender Equity Strategy alongside the third Gender Pay Gap report in March 2026.

Engagement

Addressing racism and the gender pay gap

The University of Auckland's Women of Colour staff network, in partnership with Te Tumu Herenga, hosted a panel discussion to explore the intersection of racism and gender, and highlighted findings from the University's 2024 Gender Pay Gap report.

Founder of the network, Academic Engagement Adviser Suzanne Acharya (Canadian-Caribbean descent, Nigerian, Scottish, Chinese), says the panel created space for open dialogue about the lived experiences of women of colour in the University workplace. She emphasised the importance of allyship – the simple act of leaders to support, amplify and advocate for those often marginalised. Acharya says tackling the inequities that exist, and the gender pay gaps, presented the University with an opportunity to be a bold leader and set an example on ways to improve workplace culture and enhance the well-being of staff.

Panellists encouraged attendees to pursue leadership roles and unite as a community to drive change.



Suzanne Acharya

Research/funding

How are we talking about fat bodies?

In her confronting research thesis, Dr Ashlea Gillon prompted people to think and talk about fat bodies differently and challenged dominant narratives around fatness, health and Indigenous identity.

Gillon (Ngāti Awa, Ngāpuhi, Ngāiterangi) explored how fat wāhine Māori are portrayed and treated within society and the health system. Rather than viewing fatness as a problem, she reframes it as a site of body sovereignty, resistance and cultural reclamation.

Her thesis, grounded entirely in a mātauranga Māori world view, is a first of its kind: a research journey anchored in Māori narratives, values and resistance. It critiques the systemic oppression faced by fat Indigenous women, including racism, sexism, healthism and fatphobia. At its core is the powerful atua (goddess) Hine-nui-te-pō.

Gillon's personal journey – navigating chronic illness and being the first in her family to attend university – adds depth and authenticity to her work. She acknowledges the support of wāhine Māori mentors and supervisors who helped guide her through academia.





Winiata Marae in Taihape

Sustainable Development Goal 6

Ensure availability and sustainable management of water and sanitation for all



Research publications in 2025	
102	Number of University of Auckland publications
28%	Share of New Zealand papers

Research/funding

Winiata Marae hosts groundbreaking water science lab

Winiata Marae in Taihape has become the first marae in the country to host a dedicated water science laboratory, a milestone achievement in bridging Mātauranga Māori and Western scientific research. This initiative is the result of a partnership between the University and Te Rūnanga o Ngāti Hinemanu, Ngāti Paki (mana whenua) and Downer New Zealand. Support for the project was bolstered by the Ministry of Business, Innovation and Employment's Unlocking Curious Minds fund.

The lab, housed in a repurposed prefab building donated by Downer, is designed to serve as a community hub for rangatahi (youth), kaiako (educators) and mana whenua to engage in water science and environmental stewardship. It focuses on the Mangaone, Hautapu and Rangitīkei rivers, which hold cultural and ecological significance for the local iwi. The facility will enable hands-on learning, water testing, and research that blends engineering and scientific with Indigenous knowledge systems.

Researchers from the faculties of Engineering and Design, and Science, worked closely with the community in growing their capability, with emphasis on the lab's role in fostering Kotahitanga (unity) between iwi, academia and industry. The initiative builds on years of local knowledge revitalisation and aims to empower future kaitiaki (guardians) by providing tools and training to monitor and protect freshwater ecosystems.

Industry partners, such as IDEXX, contributed equipment and expertise, enabling the lab to conduct advanced water quality testing. The project also supports STEM education, encouraging rangatahi to pursue careers in science and engineering while remaining connected to their whenua (land) and whakapapa (ancestry).

Marae project lead Jordan Winiata described the initiative as an important step forward for the marae and its community.

Engagement

A water crisis on the horizon

Aotearoa New Zealand is facing an increasingly urgent water crisis, driven by ageing infrastructure, pollution, climate change and fragmented governance. These were the issues discussed at a panel discussion hosted by Ngā Ara Whetū and the University of Auckland's Water Research Centre.

The event, *A Coming Water Crisis: Science, Politics, and Solutions*, brought together leading experts including Professor Dame Juliet Gerrard, Associate Professor Dan Hikuroa, Professor Naresh Singhal and Dr Filippo Verre. It was moderated by Associate Professor Maria Armoudian.

The panel highlighted the deteriorating state of New Zealand's water systems, with infrastructure in a "dire state" according to Hikuroa. Approximately 22 percent of piped water is lost to leaks, and many wastewater treatment plants operate under expired consents. Auckland's beaches frequently become unsafe for swimming after rainfall due to stormwater contamination, underscoring the consequences of decades of underinvestment in infrastructure.

This isn't just an Auckland problem, explained Hikuroa. Intensive land use is draining waterways for irrigation and contaminating rivers, lakes and, eventually, the sea, with sediment and excess nutrients. Forestry can also lead to sediment washing into waterways, smothering aquatic and marine life. Massive amounts of forestry slash is washing into rivers and onto beaches.

Hikuroa offered a Māori perspective, framing water as a taonga – sacred and relational – rather than a commodity. He advocated for the integration of Mātauranga Māori with scientific approaches to water governance, calling for a shift from extractive models to ones grounded in kaitiakitanga (guardianship).

Gerrard raised concerns about the risks of waterborne illnesses such as cryptosporidium, giardia and campylobacter. She also warned of rising nitrate levels linked to synthetic fertiliser use, which poses risks that include blue-baby syndrome and potentially cancer. Antimicrobial resistance and emerging contaminants like PFAS and microplastics further compromise water safety.

Climate change is compounding these challenges, intensifying droughts, floods and contamination risks. Addressing Aotearoa's water crisis requires more than technical fixes. The panel called for urgent infrastructure upgrades, robust regulation and cross-sector collaboration. They emphasised the need for holistic, future-focused solutions that honour both ecological realities and Indigenous values.

Engagement

Conference highlights Indigenous ties to water and land

Waipapa Taumata Rau hosted its inaugural Water and Indigenous (WAI) conference, bringing together Indigenous scholars, students and community researchers from Aotearoa, Hawai'i, Native American nations and the Pacific. The three-day event explored the spiritual, cultural and ecological significance of water, emphasising Indigenous guardianship and the interconnectedness of land and water.

Held across multiple venues – including Waipapa Marae, Fale Pasifika, Ōrākei Water Sports, and Ihumātao – the gathering blended academic dialogue with experiential learning. Delegates participated in wānanga focused on whakawhanaungatanga (building connections) and shared research on Indigenous scholarship and water protection. Postgraduate students from the University of Auckland and the University of Hawai'i at Mānoa also had a chance to share their research and experiences of what it means to define Indigenous scholarship.

Conference topics ranged from decolonisation and governance to reclaiming land and water rights. Participants also acknowledged the challenges Indigenous scholars face, particularly in politically fraught environments.

The WAI Gathering reinforced the importance of Indigenous-led approaches to environmental stewardship and knowledge-sharing. It served as a platform for building international solidarity and advancing holistic, culturally grounded responses to water-related challenges.

Engagement

Water resilience and innovation at Whareponga Valley workshops

A group of around 40 iwi members from Whareponga Valley in the Gisborne region travelled to the University of Auckland in late 2024 to participate in a series of workshops designed to address the pressing climate and energy challenges facing their remote community. The initiative brought together iwi representatives and researchers and students from the Faculty of Engineering and Design and the Business School, to explore practical, culturally grounded solutions to environmental challenges.

Water-related issues were central to the workshops, especially in light of the damage caused by extreme weather events such as Cyclone Gabrielle. Whareponga Valley had long relied on diesel generators and LPG for its energy needs – resources that are increasingly vulnerable to disruption due to extreme weather events.

Participants engaged in hands-on sessions covering renewable energy technologies, circular waste systems, water purification and ecological road construction.

Led by Professor Saeid Baroutian, the workshops introduced the community to biogas production from organic waste, including the use of digestate as a nutrient-rich by-product. Attendees also learned about digital twin technology to model and optimise energy systems and explored marine energy harvesting as a potential solution for coastal communities.



Research/funding

Water Research Centre

The University of Auckland Water Research Centre generates innovative solutions for the water sector's most challenging issues in the Asia-Pacific region. A cross-institutional network of leading engineers and scientists working to secure Aotearoa, New Zealand's water future, it focuses on:

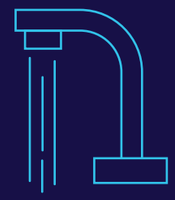
- Designing water infrastructure resilient to climate change
- Improving treatment efficiency and resource recovery
- Developing tools to assess and manage threats to water resources
- Shielding communities from flood, drought, and tsunami risks
- Nurturing the next generation of water professionals

The centre uses a cross-disciplinary approach in its research, which broadly falls into three key strategic areas: enhancing the resilience of water resources, infrastructure, and communities to disasters, climate change and emerging contaminants; developing and implementing decentralised, resource-efficient and environmentally sustainable water and wastewater treatment solutions; safeguarding public health and the ecological integrity of aquatic ecosystems from emerging threats and contaminants.

The Water Research Centre has access to state-of-the-art facilities and infrastructure for testing, analysis, modelling and experimentation and it welcomes organisations and individuals to collaborate in developing the science, technology and policy to protect Aotearoa New Zealand's waters. The centre partners with iwi, Māori businesses and mātauranga Māori specialists to co-develop solutions aligned with Te Tiriti o Waitangi. It is also developing flexible educational pathways for water professionals through micro-credentials and short courses in collaboration with leading institutions.



Data Snapshot



Campus water consumption (2025)

450,468m³

Volume of water used (including accommodation buildings)

242,569m³

Volume of water used (excluding accommodation buildings)

5.3m³

Volume of water used per member of campus population* (excluding accommodation buildings)

** The campus population comprises 45,433 students and staff.*



Sustainable Development Goal 7

Ensure access to affordable, reliable, sustainable and modern energy for all



Research publications in 2025	
207	Number of University of Auckland publications
33%	Share of New Zealand papers

Research/funding

Wave-powered tech turns the tide on seafood farming

What if ocean waves could power our seafood farms? Remote seafood farms often lack access to clean, reliable energy. Salmon farms typically rely on diesel generators, which are costly and carbon-intensive. Mussel farms, on the other hand, often don't use electricity at all – but with a steady power supply, they could adopt tools like cameras, lights and sensors to boost efficiency and productivity.

Mechanical engineer Dr Jonathan Everett has developed a wave energy converter (WEC) to address these energy challenges for the aquaculture industry. His PhD research focused on creating a device that harnesses both vertical and horizontal wave motion to generate electricity – even in calm conditions. The WEC consists of a buoy magnetically linked to a generator, which produces power as the buoy moves with the waves.

Deployed at a mussel farm in the Aotea Harbour, off the coast of Waikato, the prototype successfully generated and stored electricity without relying on diesel or solar panels.

This breakthrough has led to the founding of AMES NZ, a start-up based at the University's Newmarket Innovation Precinct, aiming to commercialise the technology. The company is currently testing two models: a 50W version for salmon farms and a 5W version for powering data buoys.

Research/funding

Electric vehicles and the clean-energy paradox

A study by the University of Auckland and Xiamen University in China revealed that global electric vehicle (EV) adoption won't reduce carbon emissions unless countries clean up their electricity grids. Analysing data from 26 countries over 15 years, researchers found a counter-intuitive trend: higher EV uptake was associated with increased carbon (CO_2) emissions. The reason? In a number of countries, EVs are still being powered by electricity generated through burning fossil fuels like coal or oil.

Associate Professor Stephen Poletti and doctoral candidate Simon Tao argued that EVs are only as environmentally beneficial as the energy sources powering them. In countries where coal and oil dominate electricity generation, EVs may contribute more emissions than modern petrol or diesel vehicles. The study suggests that meaningful reductions in CO_2 will only occur when renewable energy accounts for at least 48 percent of global electricity – currently sitting at just over 30 percent.

New Zealand, with over 80 percent renewable electricity, is well-positioned to benefit from EV adoption. The researchers advocate for policies that promote renewable energy integration, such as carbon pricing, smart grids and community-based energy projects. They also highlight the need to eliminate fossil fuel subsidies and support innovation in green technologies.

The research is a reminder that decarbonising transport can't happen in isolation.

Research/funding

What drives energy savings at work?

Businesses can cut energy waste by creating a workplace culture where saving power feels encouraged, not enforced, a study from the University's Business School revealed. Published in *Renewable and Sustainable Energy Reviews*, the research synthesised findings from 70 studies on employee energy-saving habits.

The study identified key drivers of energy-saving behaviour: personal attitudes, social norms, habits, organisational culture and peer feedback. It suggested that employees were more likely to adopt sustainable practices when they felt supported and autonomous, rather than monitored or penalised. For example, allowing staff to control lighting and temperature settings, and providing regular feedback with positive reinforcement, can lead to lasting behavioural change. Providing information alone is not enough and, in some cases, it may even backfire if it's seen as personal monitoring.

Case studies from Canada and the Netherlands show that peer education and public recognition outperform financial incentives in promoting energy conservation. The research concludes that businesses should prioritise engagement strategies that build shared responsibility and normalise energy-saving actions.

Engagement

The 2025 New Zealand Energy Conference

How can energy be affordable, secure and sustainable? This trilemma was a central theme of the 2025 New Zealand Energy Conference, led by the University's Energy Research Consortium. The conference provided a whole-of-sector platform for knowledge-sharing and critical discussions, catalysing attention around possible energy futures

Professors Emilson Silva and Brent Young highlighted the need for electrification and increased renewable energy integration. However, they cautioned that renewables like solar and wind are vulnerable to climate variability, which can affect reliability and pricing.

University researchers are developing tools to help industry manage energy demand more flexibly, particularly during peak periods. Innovations include digital twin technology, which simulates energy systems to facilitate what-if type scenarios and optimise planning and operations – similar to flight simulators used in aviation.



Professor Emilson Silva

Operations

Building tuning for carbon reduction and cost savings

Ongoing building tuning initiatives across multiple sites are delivering significant energy and cost savings while reducing carbon emissions. Led by the Technical Services team in Facilities Management, tuning activities include optimising HVAC systems, fixing faulty sensors and valves, adjusting heating and cooling setpoints, and conducting after-hours surveys to identify unnecessary energy use.

In Building 260 alone, targeted interventions – such as pump-speed reductions, valve replacements, and control system adjustments – have achieved annualised savings of more than 615,000 kWh, equating to approximately $94,000, nearly double the original savings commitment. Across other buildings, further efficiencies are being realised through improved sensor configurations, decarbonisation feasibility testing and enhanced scheduling.

Notably, our six-star Green Star Building 201 remains the most energy-efficient on campus, while Hiwa, our new recreation centre has outperformed its design energy target by 13.2 percent. These efforts demonstrate the tangible impact of building tuning in driving down operational costs and supporting a sustainable estate.

Data Snapshot

In 2025, the University consumed just under 98 million kilowatt hours of energy in the form of electricity or natural gas. The overall consumption of electricity was 9 percent above the 2019 baseline, while the consumption of reticulated natural gas was 20 percent lower. Accommodation buildings account for 15 percent of the total electricity and 24 percent of the total natural gas consumption.

The University supported renewable energy supply by purchasing from carbon-zero certified sources. Te Pūtahi Tangata (Building 201) also generates renewable energy through its photovoltaic solar array.

Energy consumption (2019–2025)	
Total electricity consumption	
2019	70,987,977 kWh
2025	77,367,805 kWh
Total natural gas consumption	
2019	26,427,303 kWh
2025	21,130,462 kWh

*2019 is the baseline year, 2025 is the most recent full year.

Electricity sources (2025)	
Toitū carbon-zero certified	77,202,416 kWh
On-site renewable	121,043 kWh
Leased asset electricity	44,346 kWh





UN High-Level Political Forum on Sustainable Development, held in New York, featuring three University staff members

Sustainable Development Goal 8

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



Research publications in 2025	
124	Number of University of Auckland publications
21%	Share of New Zealand papers

Engagement

University leads global efforts on decent work and economic growth

The University of Auckland was appointed as Chair of the United Nations Academic Impact (UNAI) Hub for Sustainable Development Goal 8 (SDG 8), placing Aotearoa New Zealand at the forefront of global efforts to promote decent work and inclusive economic growth. This prestigious role recognises the University's leadership in sustainability, research and innovation, and its commitment to shaping equitable and ethical economic systems.

SDG 8 calls for sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all. The University's Business School research centre, Juncture: Dialogues on Inclusive Capitalism, leads the implementation of the UNAI SDG 8 initiatives, which include research, education, and outreach activities. Juncture's work is grounded in Te Ao Māori principles and seeks to redefine prosperity through ethical investment, responsible business practices and equitable wealth distribution.

In September 2025, University representatives attended the UN High-Level Political Forum on Sustainable Development in New York, to share insights and collaborate with other global institutions. Professor Susan Watson, Dr Drew Franklin and Dr Billie Lythberg highlighted the importance of academic research and cross-sector partnerships in addressing labour rights, income inequality, and the future of work.

Explaining SDG 8, Juncture researchers emphasise the tension between traditional models of economic growth and the need for fairness, sustainability and well-being in employment.

Engagement

Student-led social enterprise SavY broadens its financial-literacy impact

SavY, a student-led social enterprise founded in 2008 through the University of Auckland's Velocity entrepreneurship programme, continues to make significant strides in financial education. The organisation recruits university students to deliver interactive workshops that demystify financial concepts for secondary school pupils. To date, SavY has reached more than 65,000 students across Auckland and Wellington and has become one of Velocity's highest-achieving social enterprises.

Its youth-led model makes financial education relatable and engaging. In 2024 alone, SavY facilitated 198 workshops, with plans to deliver 250 in 2025. Earlier this year, they took their largest booking at a single school, running 49 workshops at Albany Junior High School. The organisation's inclusion in the Retirement Commission's Financial Education Providers Advisory Group marked a major milestone, confirming SavY's status as a key player in financial-literacy efforts.

Recent partnerships with KiwiSaver provider Pathfinder Asset Management, and charity HealthCare Plus, have enhanced content on investing and provided financial support. SavY has expanded its facilitator network to 100, and with financial education now embedded in school curricula, it is well-placed to support students understand more about money.

CEO Adam Wong-Toi emphasises the importance of early financial education in shaping long-term well-being. SavY's work reflects a broader commitment to empowering young New Zealanders with the tools to navigate an increasingly complex economic landscape.

Engagement

Māori economy thriving, entrepreneurship remains poised for growth

A new report from the Ministry of Business, Innovation and Employment paints a powerful picture of a Māori economy that is growing in scale and influence, and increasingly diverse, values-driven and entrepreneurial.

The report, *Te Ōhanga Māori 2023*, revealed that the Māori economy contributed $32 billion to Aotearoa's GDP in 2023, up from $17 billion in 2018. This growth is supported by an asset base of $126 billion, spanning Māori businesses, collectives, and self-employed individuals. The number of Māori-owned businesses has risen to nearly 24,000, with strong representation in construction, agriculture, and professional services.

Despite this progress, Māori remain underrepresented in entrepreneurial leadership. The report highlights the importance of Māori concepts – such as tauutuutu (reciprocity) and manahau (impactful value creation) – in shaping business models that reflect and uplift Māori identity and community well-being.

The University's Centre for Innovation and Entrepreneurship (CIE) is actively supporting Māori entrepreneurship through initiatives like Whiua ki te Ao, Innovation Wānanga, and ecosystem study tours. UniServices, the University's commercialisation arm, has developed Māori intellectual property policies and leadership programmes to support Māori innovators.

The report and the University's initiatives signal a growing depth and diversity in Māori entrepreneurship, with a clear focus on intergenerational impact and cultural integrity.

Data Snapshot



Employees on secure contracts* (2025)

5,406

87%

Employees on contracts of two years or longer*

6,249
Total number of employees

Our people

Darsel Keane appointed to Auckland Tech Council

Darsel Keane, Director of the University's Centre for Innovation and Entrepreneurship (CIE), has been appointed to the Auckland Business Chamber's Tech Council, a strategic advisory body established to support the region's technology ecosystem. Her appointment reflects Keane's leadership in fostering innovation, entrepreneurship, and industry-academic collaboration across Aotearoa.

Keane has played a pivotal role in building entrepreneurial capacity within the University, supporting student ventures, commercialisation pathways and inclusive innovation. Under her direction, CIE has launched initiatives that empower diverse founders and promote sustainable, impact-driven business models.

Keane's appointment is an opportunity to collaborate more closely with industry partners, government and community organisations to shape a future-ready Auckland.



Darsel Keane

Research/funding

RosterLab: AI-powered innovation supporting healthcare workers

RosterLab, a start-up that began life as an entry in the University's Velocity $100K Challenge, has expanded, thanks to $1.75m in seed funding.

In hospitals, where every second counts, ensuring optimal staffing is critical. RosterLab is redefining workforce management and improving healthcare efficiency through rostering solutions that balance complex variables – union rules, employee preferences and operational needs. Founded by alumni Dr Isaac Fialho and Dr Ben McDonald, the company has developed an advanced AI-powered platform that generates fair, efficient and flexible schedules for healthcare workers, addressing long-standing challenges in workforce management.

Sophisticated algorithms ensure that rosters are not only compliant but also responsive to the well-being of healthcare professionals. By automating complex scheduling tasks, RosterLab reduces administrative burden, saving clinicians days of time each month while also making staff work safer and more flexible.

RosterLab has moved to the University's Newmarket Innovation Precinct, and with ongoing support from the University, continues to refine its technology and expand its reach.

Research/funding

Mana Moana: The legacy of Māori fisheries

Mana Moana, a groundbreaking new book by Professor Carla Houkamau and Dr Robert Pouwhare, dives into the legacy of Māori fisheries, Indigenous economic development and the role of Te Tiriti o Waitangi in business. Published by Auckland University Press, it explores Māori fishing traditions and inter-tribal trade, as well as highlighting key moments in the evolution of rights through the 1992 Treaty of Waitangi Fisheries Settlement and the establishment of commercial entity Moana New Zealand.

Māori currently hold around 33 percent of New Zealand's commercial fishing quota and a 50 percent stake in the Sealord Group. However, the authors argue that these rights have been returned in forms that differ significantly from the sophistication of traditional Māori fishing practices and the intricate management systems that sustained these resources for generations.

Moana New Zealand is at the heart of this book, but the story is also about the broader economic sovereignty and the movement of Māori businesses embedding ancestral values into governance, investment strategies and stakeholder relationships.

Mana Moana also serves as a teaching resource, complementing the University's new first-year course, Waipapa Taumata Rau: Exploring the Māori Economy – Business Beyond Profit.

Research/funding

Fortified but fragile: expatriate life in Kabul's compounds

What happens when you take individuals from around the world, confine them to a prison-like environment in the middle of a war zone, and expect them to work and live together? Dr Sam Mackay's doctoral research at the Business School offered a rare and unsettling glimpse into the lives of expatriates working in Kabul's fortified compounds. Drawing on his own experience as a senior United Nations consultant in Afghanistan, Mackay's thesis – Sexcapades, Drug Hazes and Terrorist Attacks – explored the psychological and social toll of living and working in high-security environments designed to shield foreign workers from external threats.

Through in-depth interviews with 36 expatriates, including New Zealanders and Australians, Mackay uncovered a paradox: while compounds were built for protection, they often became sources of harm. Interviewees described the environment as claustrophobic and oppressive, with blurred boundaries between work and personal life. Toxic workplace dynamics, sexual harassment, racism and social exclusion were common, exacerbated by the inescapability of the compound setting.



Dr Sam Mackay

The research also revealed a range of coping mechanisms, from meditation and gardening to binge drinking, drug use and casual sexual encounters – what some participants referred to as "sexcapades". These behaviours reflected attempts to manage the monotony and stress of life in a war zone, where terrorist attacks were frequent and the threat of violence ever-present.

Mackay's study challenged assumptions about the effectiveness of fortified compounds as protective strategies. He argued that while they may shield inhabitants from external dangers, they often fail to address internal risks to mental health and well-being. His work offers critical insights for organisations operating in conflict zones.





Summer Lab programme attendees

Sustainable Development Goal 9

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation



Research publications in 2025	
273	Number of University of Auckland publications
31%	Share of New Zealand papers

Education

Hands-on, minds open at Summer Lab programme

The University's 2025 Summer Lab, hosted by the Centre for Innovation and Entrepreneurship (CIE), welcomed one of its most diverse cohorts yet, with 103 postgraduate and undergraduate, domestic and international students.

Now in its ninth year, Summer Lab has become a cornerstone of the University calendar, before the academic year begins. It's designed as a practical introduction to early-stage innovation, with a focus on hands-on learning, teamwork and developing an entrepreneurial mindset.

Summer Lab is built on the idea that learning happens by doing. No lectures, no exams – just a fast-paced, practical programme that takes students through the process of identifying a problem, validating a market and developing a potential solution.

For some participants, it's their first time working on a start-up idea. For others, it's a chance to test an idea they've been sitting on for a while. Either way, they are encouraged to explore problems they care about and the focus is on action and progress, not perfection.

Highlights of Summer Lab are learning from the array of guest speakers, who share their insights and expertise, and getting to use CIE's maker space, where ideas are put to the test.

Many participants report transformative experiences, citing increased confidence, a sense of community, and exposure to new career pathways.



Education

Top university for innovation and entrepreneurship

The University of Auckland was named Innovative and Entrepreneurial University of the Year at the Triple E Awards, held in September in Prague.

It was recognised for its approach to start-up creation and innovation in teaching, research and university operations.

Vice-Chancellor Professor Dawn Freshwater said: "This award recognises our ambition to be a global leader in innovation and entrepreneurship. It celebrates the creativity and drive of our staff and students, and the way they are helping shape solutions that will benefit Aotearoa New Zealand and the world."

The University plays a leading role in advancing New Zealand's innovation ecosystem through deep engagement with industry, government and community organisations. Darsel Keane, director of the University's Centre for Innovation and Entrepreneurship, said the award highlighted the scale and impact of this work.

Deputy Vice-Chancellor Strategic Engagement Dr Erik Lithander represented the University at the Triple E Awards, an initiative of the Accreditation Council for Entrepreneurial and Engaged Universities (ACEEU) that recognises engagement and entrepreneurship in higher education. This year, 77 finalists from 30 countries competed across a variety of categories.

Research/funding

Where start-ups begin: 2025 Velocity Ideas Challenge winners

The 2025 Velocity Ideas Challenge attracted a record 318 venture proposals from students and staff, showcasing the University's vibrant entrepreneurial spirit. Organised by the student-led Velocity committee, in partnership with the Centre for Innovation and Entrepreneurship, the competition encourages participants to tackle bold ideas – from solving pressing social and environmental issues to seizing exciting new market opportunities.

This year's 22 winners were each awarded $1,000 and received expert feedback to help advance their proposals. Entries were evaluated by 79 industry experts, with the judges remarking on the overall quality and originality, with submissions described as well thought out, creative and commercially viable.

The challenge is part of a broader innovation pipeline, with participants encouraged to further develop their ventures through Ignite Innovation, the Product Development Programme, and the flagship Velocity $100k Challenge. The prizegiving featured keynote speaker Bowen Pan, a Velocity alumnus and former Facebook product leader.

Research/funding

Health spin-outs win at Hi-Tech Awards

Spin-outs Toku Eyes and Kitea Health were celebrated at the 30th New Zealand Hi-Tech Awards, underscoring the University's leadership in deep-tech innovation.

Toku Eyes won the Duncan Cotterill Most Innovative Hi-Tech Software Solution for its AI-powered software that detects cardiovascular disease and Type 2 diabetes through retinal scans, enabling earlier and more accessible health risk assessments. By increasing accessibility to screening, Toku Eyes has changed the lives of numerous people who will be able to receive diagnoses of preventable diseases before it is too late.

Kitea Health received the Aware Group Most Innovative Deep Tech award for its implantable sensor technology, which allows real-time monitoring of heart failure and hydrocephalus, providing clinicians with data for improved decision-making and patient care.

The awards, which drew more than 300 entries from across the country, recognise excellence in software, electronics, telecommunications, agritech and more.

Research/funding

Taddy, the robot fish with muscle and smarts

A motorless Kiwi robot fish had its inaugural 'swim' at a conference in Vancouver. University researchers unveiled 'Taddy', a pioneering soft robotic fish designed to revolutionise underwater exploration and environmental monitoring.

The unveiling of Taddy the Tadpole marked the first bioengineering project to combine research into artificial muscles and sensors. Unlike conventional underwater robots that rely on noisy, rigid motors and propellers, Taddy is powered by artificial muscles made from electroactive polymers. This technology allows the robot to swim with lifelike, undulating movements that closely mimic the natural propulsion of real fish and tadpoles.

Taddy's flexible body and tail are engineered to bend and twist in response to electrical signals, enabling it to manoeuvre through complex aquatic environments with remarkable agility. This allows Taddy to squeeze through tight spaces and interact safely with fragile marine life – capabilities that are challenging for traditional, rigid robots.

The research team sees significant potential for Taddy in ecological research and conservation. Its quiet, efficient propulsion minimises disturbance to aquatic ecosystems, making it ideal for non-invasive monitoring of water quality, aquatic habitats and marine biodiversity.



Taddy the Tadpole

Research/funding

The med-tech innovation set to redefine hearing loss treatment

Researchers Dr Haruna Suzuki-Kerr and Professor Peter Thorne are leading a med-tech innovation aimed at transforming treatment for hearing loss, which affects nearly one in six New Zealanders and 1.5 billion people worldwide.

The large majority of hearing loss is a type called sensorineural hearing loss, which happens gradually and is irreversible once developed. Promising drug compounds exist, but none has made it through clinical trials, largely due to the challenge of delivering treatments directly to the inner ear. Current options are limited to hearing aids or cochlear implants, both of which have significant limitations.

To bridge this gap, the research team is developing a device to deliver therapeutic compounds directly to the cochlea. Supported by the Ministry of Business, Innovation and Employment's Endeavour Fund, the project has shown promising results in sheep models, chosen for their anatomical similarity to humans.

The researchers plan to establish a New Zealand-based company to manufacture and commercialise these inner ear treatments, attracting international investment and fostering partnerships with pharmaceutical firms. The innovation has the potential to improve health equity and participation for those with hearing loss, while also delivering significant economic benefits.

Research/funding

$20m applied-doctoral scheme boosts academia-industry partnership

The Auckland Bioengineering Institute was host to a landmark $20 million initiative launched by the government to establish New Zealand's first applied doctorate programme, with the goal of producing doctoral graduates who are not only research experts but also business-ready innovators.

The Applied Doctorate Scheme is a national programme led by a consortium formed by the University of Auckland in partnership with Victoria University of Wellington, University of Otago and Massey University. The University of Auckland is secretariat for the scheme, which will fund up to 30 PhD students annually over five years.

Supported by the Tertiary Education Commission, this initiative responds to the growing demand for highly skilled professionals who can translate advanced research into real-world impact. PhD candidates in this programme will work closely with industry partners on projects that address pressing challenges in sectors such as health, technology and engineering. This hands-on, collaborative approach ensures that graduates develop both deep technical expertise and practical commercial skills, preparing them to drive innovation and economic growth.

A key feature of the scheme is its strong emphasis on industry engagement. Students will benefit from mentorship, networking opportunities, and direct exposure to commercial environments, while businesses gain access to cutting-edge research and emerging talent. It aims to foster leadership, entrepreneurship and adaptability.

Ultimately, this $20 million investment is set to create a new generation of doctoral graduates who are equipped to make an immediate and meaningful impact in the workplace, strengthening the connection between New Zealand's research sector and its broader economy.



Science Minister Dr Shane Reti chose the Auckland Bioengineering Institute as the venue to announce a groundbreaking PhD funding scheme



Dr Ying Wang

Sustainable Development Goal 10

Reduce inequality within and among countries



Research publications in 2025	
227	Number of University of Auckland publications
34%	Share of New Zealand papers

Research/funding

Cry for help: young Asian students in Aotearoa

Young Asian sexual violence survivors' experiences and the need for support within New Zealand schools was the focus of a two-year study led by Dr Ying Wang, a research fellow at the Centre for Arts and Social Transformation (CAST). Despite Asians making up more than 17 percent of the New Zealand population, and being one of the fastest-growing groups in the country, this issue had been largely unexplored.

Her study, involving interviews with survivors, educators and caregivers, found systemic gaps in understanding and support. Participants from diverse Asian backgrounds – Indian, Chinese, Korean, Filipino and Pakistani – reported delayed or absent support, strained relationships and cultural stigma. Survivors often felt misunderstood due to cultural disconnects, with educators lacking the training to respond appropriately.

Support arrived too late if at all, friendships became strained, parents tried to do their best but were trapped in shame, fear and stress, and there was a lot of concern about the family name and honour.

Survivors expressed a desire to be heard and supported in ways that reflected their cultural identities. Wang advocated for comprehensive training for school staff, culturally relevant education for families and improved peer-support programmes.

Research/funding

Barbershop-based health research for Pacific men

Associate Professor Vili Nosa has been leading an innovative project exploring if barbershops can help deliver better health outcomes for Pacific men. The initiative, supported by the Health Research Council of New Zealand, aimed to address health inequities by meeting Pacific communities where they are most comfortable.

Barbershops are central to Pacific male social life, offering a familiar and trusted environment. Nosa's project leverages this setting to promote health awareness and encourage early engagement with health services. The research will explore how barbers can act as informal health advocates, sharing information and fostering dialogue around health issues.

The project will culminate in a three-month pilot in a real barbershop, testing its effectiveness as a place to deliver health messages or simple interventions.

Data Snapshot

Students from developing countries* (2025)

1,620

4%

36,566
Equivalent full-time students

** Developing countries: as defined by the World Bank*

Research/funding

Safeguarding Pacific youth

Pacific researchers from across New Zealand urged policymakers to reinstate the 2020 Relationships and Sexuality Education (RSE) guidelines, which have been scrapped by the Ministry of Education.

University of Auckland Research Fellow, Dr Analosa Veukiso-Ulugia, says their removal poses great risk for Pacific, Rainbow and gender-diverse and that the guidelines are rooted in Pacific values of collective care, respect and cultural identity.

Meanwhile, a research initiative led by Veukiso-Ulugia aimed to address child and youth sexual abuse in Pacific communities. The four-year project – Empowering Villages to Safeguard Pacific Children – will combine community education data analysis to better understand and prevent abuse.

The study will assess the accessibility and relevance of existing data on Pacific families, aiming to identify gaps and inform targeted interventions. A 'train the trainer' programme will be developed for community-based sexuality education, designed to empower parents, educators and leaders to foster open, informed conversations about sexual health and safety.

Recognising the cultural sensitivities, the project seeks to make Pacific sexuality education resources more accessible and practical. Talanoa workshops will guide parents and teachers through these materials, reinforcing the role of parents as first educators and creating safe spaces for learning at home.

Research/funding

Research tackles tragic lung cancer rates for Māori

Māori are hit hardest by lung cancer, an inequity in the sights of University of Auckland senior lecturer Dr Laird Cameron.

While working as a medical oncologist at Auckland Hospital and Canopy Cancer Care for the past eight years, Cameron has seen first-hand the disadvantage faced by Māori with lung cancer.

Māori have a significantly higher incidence of lung cancer than non-Māori and a 1.3 times higher mortality rate. More than 300 Māori die from lung cancer each year, a statistic driven not only by higher smoking rates but also by systemic failures in healthcare delivery. Cameron's clinical experience has shown that Māori are less likely to receive surgery or anti-cancer medicines, and the health system often does not meet their needs.

Thanks to a $1.2 million Health Research Council grant, Dr Cameron and team are working to optimise immunotherapy for Māori with advanced non-small cell lung cancer. His goal is to ensure that the benefits of new cancer treatments reach Māori.

Research/funding

Navigating ACC: Challenges for older Māori

Healthcare services and ACC need to change to better meet the needs of older Māori who suffer injuries. An inaugural study exploring Māori experiences of injury care and recovery was published earlier in 2025 by Dr Joanna Hikaka, a director of the University of Auckland's Centre for Co-Created Ageing Research.

Hikaka's findings revealed that older Māori face significant barriers when accessing injury care through ACC. The research, involving 23 Māori aged 65–74 and 21 healthcare workers, found that the ACC system is often confusing, inaccessible and culturally misaligned. Despite similar injury hospitalisation rates to non-Māori, Māori aged over 50 had a 46 percent lower ACC claim rate in some regions.

Participants described the system as impenetrable, with unclear processes and inadequate support. Many lacked advocates to help them navigate claims, leading to frustration and psychological distress. The study calls for health navigators (paeārahi) to guide kaumātua through the system and ensure equitable access.

Many felt the health system was too focused on physical care, when they needed a more holistic approach. Financial pressures and long wait times for treatment compounded the burden. While ACC has begun funding rongoā practitioners, access remains limited.

Research/funding

Empowering whānau through culturally safe cancer screening

PhD candidate Nadine Riwai hopes to transform national cancer screening for Māori. Riwai has been leading research into the delivery of screening through culturally safe, whānau-centric approaches.

Her work aims to address low Māori participation in national screening programmes for breast, bowel and cervical cancer, which contributes to delayed diagnoses and higher mortality rates. Drawing on her nursing background and personal experiences, she is developing a kaupapa Māori framework that centres whānau voices and lived experiences. Her research has been focused on identifying both the barriers and enablers to cancer screening, with the goal to create screening services that are accessible, empathetic and mana-enhancing.

Riwai emphasises the importance of intergenerational kōrero and community-led design. She says culturally aligned programmes can normalise early screening and empower tamariki and mokopuna to live healthier lives.

Operations

African Staff Network launched

The African Staff Network was launched in September 2025. The network is for any University of Auckland staff of African descent or who identify with African heritage, and for allies who share the commitment to community, inclusion and celebrating African cultures. Its mission is to foster a thriving community of African staff at the University, where connection, cultural pride and professional growth are nurtured. It aims to amplify African voices, celebrate diverse heritage and collaborate to create an inclusive and equitable environment that benefits its members and the wider University.



Inaugural African Staff Network meeting

Data Snapshot



Students from refugee backgrounds (2025)

953

3%

36,566
Total number of students*

** Equivalent full-time students*

Data Snapshot

Disabilities in our community (2025)

4,209

12%

Students with a disability

36,566
Total number of students*

** Equivalent full-time students*

431

7%

Employees with a disability

6,249
Total number of employees

Education

Rising number of first-year Pacific students at the University

The University's Semester One intake of 473 first-year Pacific students marked a promising shift toward increasing Pacific academic representation. At the Fale Pasifika 'Anau 'Aiga event, Pro Vice-Chancellor Pacific Professor Jemaima Tiatia-Siau celebrated the achievements of 72 scholarship recipients, including those awarded Pacific Academic, Vaka Moana, Top Achiever and faculty-funded scholarships.

The event welcomed Pacific scholars into a supportive academic village, offering guidance and encouragement for their tertiary journey. Students were encouraged to embrace their Pasifika identity and seek help when needed, reinforcing the message that they should never 'paddle alone'. The importance of family support during this transition was also emphasised.

Operations

Promoting accessibility and disability awareness

In 2025, the University deepened its commitment to accessibility and inclusion through a range of initiatives led by the Office of the Pro Vice Chancellor, Equity; the Staff Diversity, Equity and Inclusion team; and the Web team.

A major achievement was the launch of the Accessibility Toolkit, which provides practical guidance on creating inclusive communications. It covers accessible emails, Microsoft 365 documents, PDFs, events and meetings. It aims to reduce the barriers to digital and in-person interactions for people with diverse needs, including those using assistive technologies or with cognitive and motor impairments.

Staff Diversity Equity and Inclusion is also supporting staff to embark on their own journeys of disability inclusion, by driving engagement with the Disability Confidence 101 learning modules developed by the Tertiary Education Commission. Completing these modules serve as a milestone for teams and individuals to develop a foundational understanding of disability, which is an important step in making the University for accessible for all.

Ratonga Hauātanga Tauira, Student Disability Services (SDS) has introduced the Hidden Disabilities Sunflower initiative to make disability support more visible on campus. Staff-training workshops were introduced to raise awareness of the sunflower symbol and build a network of informed supporters. These efforts promote a culture of visibility, safety and confidence in accessing support.

The SDS team supports students living with an impairment, or suspected impairment, and staff members wanting support and information in working with people with disabilities. SDS offers a range of services to make studying at the University an accessible and positive experience, tailoring support to suit each individual student, acknowledging every disability affects people differently.



Law and Arts student, Ayolabi (seated), together with Baki, Ayolabi's support worker, who plays a key role in helping Ayolabi navigate daily life at the University.



Wynyard Street, City Campus

Sustainable Development Goal 11

Make cities and human settlements inclusive, safe, resilient and sustainable



Research publications in 2025	
196	Number of University of Auckland publications
27%	Share of New Zealand papers

Operations

Prioritising people and plants over vehicles

In early 2025, the University's Planning and Capital Projects team completed the first phase of major landscaping works in Wynyard Street on City Campus. Previously a hard tarmac 'back-of-house' service lane dominated by car-parking, Wynyard Street is now an attractive shared space that prioritises people and plants over vehicles.

With extensive gardens, outdoor seating, improved stormwater drainage and a new shelter for manuhiri at Waipapa Marae, the project enhances campus connectivity, accessibility, biodiversity and estate resilience. A dawn ceremony and blessing marked the reopening of Wynyard Street in time for Semester One. The remaining landscaping work will be delivered alongside the construction of a new building, 230, further activating Sector 200 for staff, students and visitors.



Engagement

University architect wins top honour for social housing project

A heritage church destroyed in the Christchurch earthquakes has been transformed into an award-winning social-housing complex. Professor Andrew Barrie from the School of Architecture and Planning was recognised for his work on the Oxford Terrace Baptist Church in Christchurch, with the development named National Category Winner for best residential project at the 2025 New Zealand Commercial Project Awards.

The project provides 11 apartments and office spaces for community support organisations, serving a diverse group including refugees, disabled residents, students, parishioners and church staff. Despite a modest budget, the design achieves spaciousness and functionality through careful planning and the use of simple materials. The development extends an earlier award-winning stage, replacing the original church with a facility that includes worship spaces, parish offices, a hall, kitchen, lounge, meeting rooms, a public café and offices for social-service agencies.

A central feature of the complex is its arrangement around a cloister with a vegetable garden, orchard and shared amenities, fostering interaction among residents and the wider community. The project exemplifies how social housing can be integrated into the fabric of daily life, promoting a sense of community and belonging.

Judges praised the project as a thoughtful and generous response to the needs of both residents and the wider urban community.

Research/funding

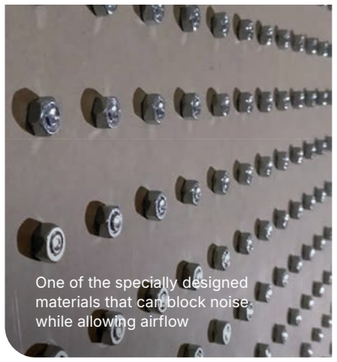
Research tackles noise and ventilation challenges in Aotearoa's cities

As cities in Aotearoa New Zealand grow denser, noise pollution and poor ventilation are becoming major concerns for residents. Traditional building materials often remedy only one of these issues, forcing occupants to choose between peace and quiet, or airflow.

Dr Andrew Hall, from the Faculty of Engineering and Design, has been leading a research project to address these challenges. Supported by a Mana Tūānuku Research Leader Fellowship and a $1.16 million investment over four years, the project aims to create healthier, quieter and more affordable homes, particularly in city centres.

The research focuses on developing specially designed materials that can block noise while allowing airflow, helping to improve sound insulation and ventilation in homes, particularly in windows, walls and doors. For example, the design of transparent acoustic screens for windows, which act as noise barriers without compromising ventilation or natural light.

By exploring how sound waves interact with these materials and how different materials work together, Hall aims to create a new class of high-performance building solutions that enhance comfort, energy efficiency and overall well-being.



One of the specially designed materials that can block noise while allowing airflow

Our people

Inspiring the next generation of climate leaders – Dylan Chand

Student Dylan Chand, Faculty of Engineering and Design, Faculty of Science, was recognised with a third Blues Award in Service and Leadership. He represented New Zealand as a Young Leader at the 2025 Mayors Forum of the World Cities Summit in Vienna, leading dialogue on youth perspectives on sustainable cities, waste and housing. His leadership bridged global and local knowledge, advocated for youth voices and demonstrated how young people can meaningfully influence urban and climate policy at the international level.

Chand's sustainability journey began as a hobby in high school, where he led environmental initiatives such as tree-planting and beach clean-ups. At university, his perspective shifted during a part-time role as a Youth Climate Catalyst at Auckland Council. Following the end of his council role, Chand launched the Climate Action Conference, a two-day event aimed at equipping young people with tools for climate leadership.

Determined to ensure that the voices of rangatahi were heard not only in decision-making processes but also in communities and industries, he founded the social enterprise Youth Climate Collective (YCC).

YCC empowers young people across Aotearoa New Zealand to take action, educating them through workshops, events and conferences on climate change. The YCC team has expanded to 28 volunteers based in Auckland, Wellington, Christchurch and Sydney, delivering workshops, events and mentoring.

Chand has built strong partnerships with organisations such as Auckland Council and Russell McVeagh and credits the University's Centre for Innovation and Entrepreneurship for supporting his entrepreneurial journey.

Research/funding

'SimCity': advancing resilience planning

The Minority Report project is a major international climate-adaptation initiative funded by Horizon Europe, the European Union's largest research and innovation programme.

Dr Theuns Henning from the Faculty of Engineering and Design is a Minority Report member who co-leads New Zealand's involvement in the project.

At its heart is the creation of a 'SimCity' that uses digital twin technology and artificial intelligence to simulate the impacts of hazards such as floods, wildfires and storms on urban infrastructure. These 3D models, which include one based on Wellington, allow planners and engineers to simulate disasters and visualise cascading effects across transport and roading, stormwater systems and housing, enabling more informed and proactive decision-making.

By focusing on future climate scenarios rather than historical data, the project supports the design of infrastructure that is fit for purpose in a changing environment.

Henning said the intention was to build a better simulation of hazards and how these hazards impact urban infrastructure; then support that with an automated way of identifying potential strategies for adaptation and decision-making.

The total funding of the project is more than $NZ9 million, with $2 million allocated to the New Zealand partners, which include Ngā Ara Whetū – Centre for Climate, Biodiversity & Society. Ultimately, the Minority Report project hopes to transfer these tools to other cities, creating a framework for global resilience planning.



Dr Theuns Henning

Data Snapshot

Staff commuting modes

According to our 2025 inaugural staff commuting survey, two thirds of University staff commute to work using low-emission modes of transport.

46%
Public transport

11%
Micromobility (bike, e-bike, e-scooter)

9%
Walking





Professor Alex Sims

Sustainable Development Goal 12

Ensure sustainable consumption and production patterns



Research publications in 2025	
121	Number of University of Auckland publications
20%	Share of New Zealand papers

Engagement

Fighting for the right to repair

Professor Alex Sims has been one of those advocating for legislative change and consumers' ability to repair their own goods. The Consumer Guarantees (Right to Repair) Amendment Bill would require manufacturers to provide repair facilities, spare parts and essential information for a wide range of products, thus extending the lifetime of products and reducing waste.

This legislative push is a response to the increasing prevalence of 'planned obsolescence', where products are designed to have limited lifespans, forcing consumers to replace rather than repair items. Sims argues that while the bill is a significant first step, broader reforms are needed, such as extending coverage to agricultural equipment and empowering the Commerce Commission to enforce compliance.

Ngā Ara Whetū – Centre for Climate, Biodiversity & Society, and the Circular Innovations Research Centre (CIRCUIT), supported the bill. In their submission, they proposed future iterations of right-to-repair legislation, with a focus on possible measures that could support sustainability and circular economy solutions.

The legislation was sent to Select Committee after passing its first reading in February. However, it has now stalled after one of the original parties backing the legislation withdrew their support.

Research/funding

Experts tackle phone battery waste using AI

University artificial intelligence (AI) experts have partnered with German researchers to address the growing problem of phone battery waste. A collaboration between the University of Auckland and Germany's Fraunhofer Institute for Solar Energy Systems (ISE) is addressing waste in battery manufacturing.

Up to 30 percent of newly produced batteries are discarded before reaching consumers, due to defects. The project aims to reduce this hidden waste by using AI to detect faults and optimise production processes.

Associate Professor Andreas Kempa-Liehr explains that battery production is resource-intensive, requiring around 32 tonnes of raw material per tonne of battery. The AI models developed in this project mimic expert decision-making, identifying defective batteries from complex sensor data and improving quality control. The goal is to refine manufacturing processes to prevent waste before it occurs.

The five-year partnership includes joint student supervision and researcher exchanges. Early results are promising, and the collaboration combines the University's AI expertise with Fraunhofer ISE's advanced battery research facilities.

Engagement

Microplastics pose 'global threat'

Professor Nathalie Gontard, a French plastics expert, was the keynote speaker at a free lecture organised by Ngā Ara Whetū, the University's Centre for Climate, Biodiversity & Society.

Gontard, the research director at the National Research Institute for Agriculture, Food and Environment (INRAE) in France, warned that microplastics present a significant global threat to both human and environmental health.

She highlighted the scale of plastic pollution, noting that between 1950 and 2025, 12 billion tonnes of petrochemical-based plastic were produced, with only 12 percent incinerated. The remaining 10.5 billion tonnes, a "gigantic reservoir" of plastic, continue to release particles into the environment and human bodies. Research shows microplastics make up around 0.5 percent of our brains.

Gontard argued that recycling is not an effective solution, as plastic particles are emitted throughout the lifecycle of plastic products. She cited artificial turf made from recycled tyres as a major source of microplastic pollution. These particles are linked to oxidative stress, inflammation, neurotoxicity and increased cancer risk, she said. She also critiqued biodegradable plastics, which often require industrial processing to break down, and instead advocated for reusable alternatives.



The University's first-ever Repair Café, held on campus in October, showed a strong appetite for fixing items and a shift from throwaway culture. Clothing, bags and small electrical appliances were among items brought along by staff and students to the University's Unleash Space. The hands-on community event saw skilled volunteers work with visitors to diagnose and fix broken household items. Around 80 percent of items were successfully repaired.

Our people

The multi-faceted Saeid Baroutian

A passion for sustainability is driving Professor Saeid Baroutian to develop solutions to some of the country's most pressing environmental challenges. He is 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), coordinating more than 60 researchers across disciplines to support circular economy initiatives. He is also Chair of the Engineering Sustainability Committee and director of the Sustainable Resource Recovery postgraduate programme. He has a lot on his plate.

Baroutian is at the forefront of sustainable innovation in Aotearoa New Zealand. His work centres on developing technologies that advance the circular economy, enhance resource recovery and minimise waste. He has published more than 140 journal articles and co-founded two clean technology start-up companies to bring his innovations to life.

The first of these, Gaiatech, addresses the environmental impact of anaesthetic gases in hospitals by trapping waste gases in a zero-waste, chemical-free canister. The other, Nurox Hydrothermal, focuses on the safe breakdown of hazardous medical waste, such as cytotoxic drugs, using pressurised hot water to convert them into valuable chemicals. Both ventures are being scaled up in partnership with healthcare and waste-management providers.

What truly drives Baroutian is seeing the real-world impact of his research. He co-led a collaboration with other University researchers to help a Tairāwhiti community combat climate-related challenges, which took on a true sense of urgency after extreme weather events, such as Cyclone Gabrielle, disrupted power and clean water supplies along with other infrastructure.

Baroutian has also 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."

Data Snapshot

Our monitoring programme measures the quantity of waste from University operations sent to landfill, as well as the quantities of materials recovered for recycling or sent for composting.



Volumes and sources of waste (2025)

Waste type	Tonnes	Proportion from accommodation buildings
Total operational waste	2,343	31%
Solid waste to landfill	1,528	29%
Materials recovered for recycling (e.g. container recycling, paper and cardboard recycling, and specialist recycling streams)	635	25%
Materials recovered for composting (e.g. food scraps and serviettes, green waste)	165	70%
Repurposed items (e.g. IT equipment)	14	N/A

Food waste diversion (2025)

Food waste	Tonnes	Food waste	
Total discarded or uneaten by all catering services*	378	Total campus population (students and staff)	45,433
Food waste recovered for composting	40		
Food waste sent to landfill*	322	Food waste per member of campus population	8.3kg
Food waste in container recycling*	16		

**Estimates were calculated based on the results of a waste audit conducted in May 2024, which found that food scraps made up 39% of the landfill stream, and 6% of the container recycling stream. Excludes accommodation buildings.*



Professor Saeid Baroutian



Sustainable Development Goal 13

Take urgent action to combat climate change and its impacts

13 CLIMATE ACTION

Research publications in 2025	
197	Number of University of Auckland publications
21%	Share of New Zealand papers

Research/funding

Antarctic expedition unearths clues to climate catastrophe

Rocks brought back from Antarctica by University of Auckland scientists hold clues to an extinction event 183 million years ago. In the Early Jurassic period when the Gondwana supercontinent was breaking apart, hot magma rising through the Earth's crust triggered the release of vast amounts of climate-warming carbon into the atmosphere with catastrophic results for many life-forms.

Led by Professor James Muirhead of the School of Environment, researchers investigated exactly how the event unfolded. The scientists were focused on the Ferrar Large Igneous Province, a region of volcanic intrusions formed during the break-up of the Gondwana supercontinent.

Over 42 days, they endured extreme conditions, including wind-chill temperatures as low as -37°C, while collecting rock samples from remote sites. The aim was to reconstruct how the magma burned off the organic carbon locked up in sedimentary rocks to release greenhouse gas. It was hoped that analysis of the rocks might reveal the rates of heating and carbon release – and hence give a sense of whether the event was sufficiently powerful in itself to cause the dramatic climate effects.

The research draws parallels between the Early Jurassic event and current climate challenges, noting that while the ancient carbon release was natural, today's emissions are caused by humans.

Research/funding

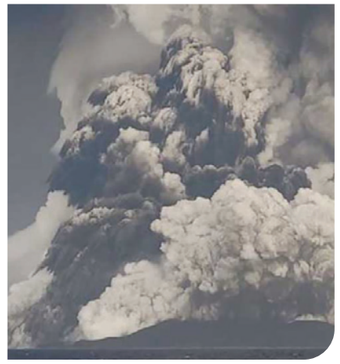
Climate effects of volcanoes beneath the waves

Research led by University of Auckland and Tongan scientists revealed that underwater volcanic eruptions can have significant and previously underestimated climate effects.

The study, published in *Nature Geoscience*, focused on the 2022 Hunga eruption in Tonga, which injected up to 3 billion tonnes of steam into the atmosphere in a single hour. This water vapour reached the stratosphere and mesosphere, contributing to cooling in the Southern Hemisphere and other atmospheric impacts.

Professor Shane Cronin and Dr Jie Wu, co-lead authors of the study, explained that submarine volcanism has often been overlooked in climate models due to limited atmospheric sulphur dioxide emissions. However, the Hunga eruption released an estimated 20 million tonnes of sulphur dioxide, most of which entered the ocean at depths between 300 and 1,100 metres.

The research team is working with Tongan partners to understand the broader hazards of submarine volcanism, including tsunami risks, shoreline damage and disruption to infrastructure such as internet cables. The study is part of a wider effort to assess the environmental and climatic implications of underwater eruptions in the Southwestern Pacific.



Research/funding

Climate crisis puts small-island nations' health at risk

Small-island developing states are bearing the brunt of the climate crisis according to a report released in late 2024. The inaugural Lancet Countdown Indicator Report revealed that more than 65 million people in these regions are increasingly vulnerable to extreme heat, rising sea levels and disease.

University of Auckland's Dr Roannie Ng Shiu (Faculty of Medical and Health Sciences), whose research plays a pivotal role in climate resilience, led the report's assessment of health, hazards and impacts. Ng Shiu emphasises that health systems are ill-prepared for the growing challenges, including non-communicable diseases, mental health issues and infectious-disease outbreaks. The report notes that only eight of 59 small-island states have national climate-health strategies, and just one has received targeted funding from the Green Climate Fund.

Rising sea levels threaten the displacement of over one million people living in low-lying coastal areas. Ocean warming is destabilising marine ecosystems, affecting food security in Pacific nations reliant on fish. The report also identifies increased transmission risks for diseases such as dengue and Vibrio infections.

Labour productivity is also impacted, with over 4.4 billion hours lost in 2023 due to extreme heat, devastating livelihoods and particularly impacting those working in agriculture and construction. The report calls for urgent international action, improved data collection and investment in climate-resilient health systems. It was produced by 35 authors across multiple regions.

Data Snapshot



University of Auckland greenhouse gas emissions* (2019–2025)

82,468 t CO_2-e
Emissions for baseline year (2019)

63,462 t CO_2-e
Emissions for latest year (2025)

23.0%

Reduction in emissions for 2025, compared to baseline year

In 2025, the University demonstrated strong progress against its Net Zero Carbon Strategy, with total emissions reduced to 63,462 tCO_2e – an 11% decrease from 2024.

** Emissions: measured by tonnes of carbon dioxide equivalent (t CO_2-e)*

Operations

Staff commuting added to carbon monitoring for 2025

To inform evolving carbon monitoring efforts, the Environment and Sustainability Office conducted a staff commuting survey to better understand travel-related emissions.

With more than 1,600 responses, the survey captured commuting frequency and transport modes and distances. Public transport emerged as the most common mode (46 percent), followed by car travel (32 percent), with micromobility and walking also notable.

The data revealed that commuting patterns vary significantly by distance, and many staff expressed strong support for sustainable transport options. Using these data, we estimated the annual carbon footprint of staff commuting at 3,404 tonnes of carbon dioxide equivalent (t CO_2-e) with car and bus travel contributing the most.

The survey marks a significant step in our carbon monitoring and will be repeated annually to track changes over time.

Our people

Climate action work earns global award

Researcher Dr Gabriela Baron won a global award for her work helping communities take action on climate change. Baron, a senior lecturer in the Faculty of Engineering and Design, received a Universitas 21 Award for Climate Action in recognition of her participatory design methods that support environmental conservation around the world.

With over 15 years' experience in design and sustainability, Baron's work is grounded in co-creation and a decolonial lens. Her work integrates Western scientific approaches with Indigenous knowledge, lived experience and community insight to foster inclusive and sustainable climate solutions.

Baron's book, *Design for Environmental Conservation: A Toolkit that Enables Sustainable, Participatory, and Distributed Innovation*, outlines a five-phase methodology for collaborative conservation projects. The toolkit provides practical templates and tools to support environmental action and is already being used in student projects.

Universitas 21 is a global network of leading universities across six continents that work together to share ideas and find solutions to shared challenges.



Dr Gabriela Baron

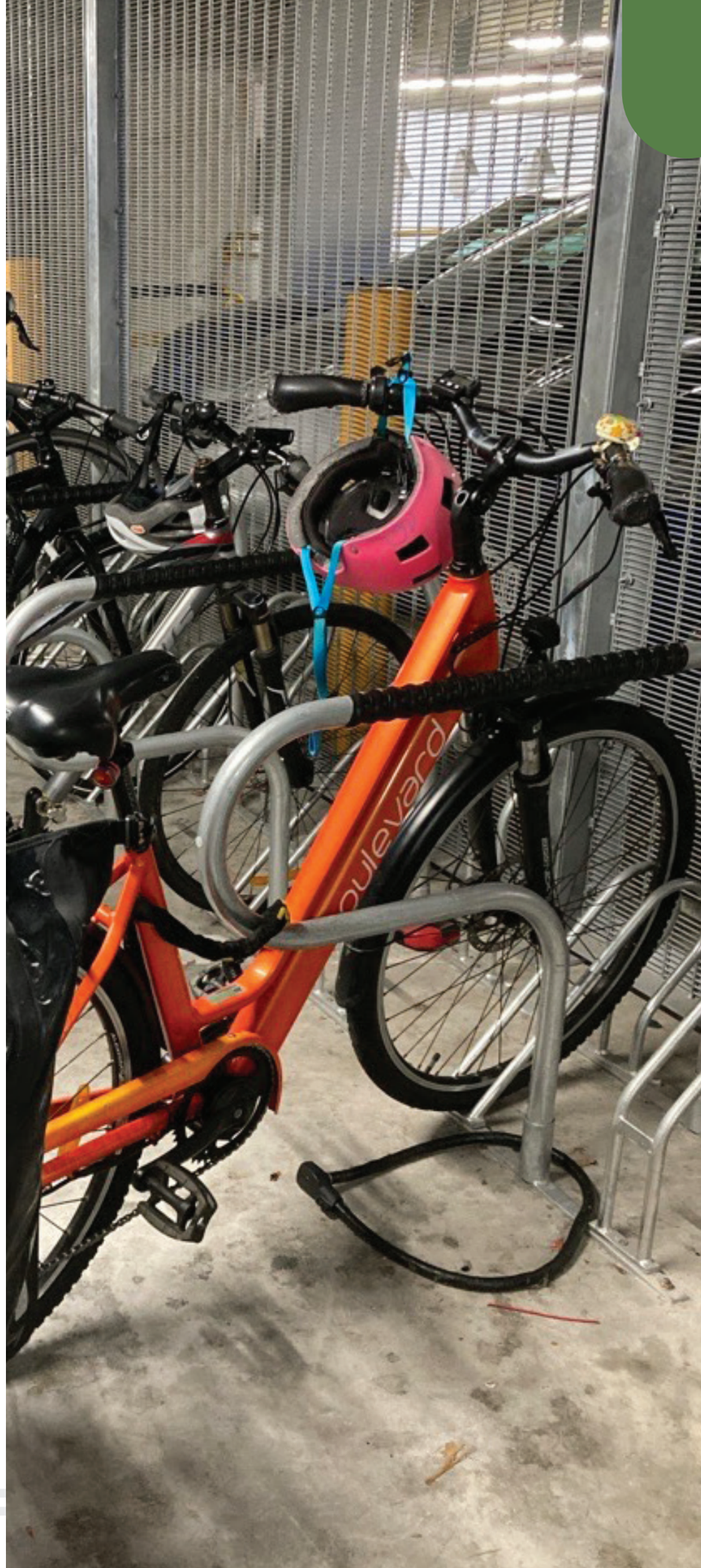
Operations

Work-related travel target surpassed

As part of our journey to net zero carbon, the University has surpassed its interim target of reducing work-related travel emissions by 25 percent for the year 2025, relative to the baseline year of 2019.

For the calendar year of 2025, work-related air travel emissions were 51 percent below the baseline, with 37 million fewer kilometres travelled. This performance reflects the impact of changes to our travel policy and booking procedures, introduced over the 2022-2023 period, that clearly define essential travel, discourage non-essential travel and encourage lower-carbon travel options for travel deemed essential.

In 2025, a working group was set up to strengthen the strategic approach, balancing institutional goals, budget constraints and sustainability commitments.





Leigh Marine Laboratory

Sustainable Development Goal 14

Conserve and sustainably use the oceans, sea and marine resources for sustainable development



Research publications in 2025	
148	Number of University of Auckland publications
28%	Share of New Zealand papers

Operations

New aquariums boost research at Leigh Marine Laboratory

The University's Institute of Marine Science opened a new state-of-the-art aquarium facility at its Leigh Marine Laboratory, north of Auckland, in early 2025. The multimillion-dollar development will significantly enhance marine research.

The Dr Anneliese Schuler Aquaria Laboratory was named in honour of philanthropist Dr Beate Schuler's mother, and blessed by mana whenua Ngāti Manuhiri, reflecting the institute's partnership with local iwi in Hauraki Gulf restoration. Beate Schuler also funded the construction of the institute's research vessel *Te Kaihōpara* (The Explorer).

This advanced facility allows scientists to precisely control temperature, light and noise, enabling detailed studies on animal and plant physiology, aquaculture and the impacts of environmental stressors such as microplastics, ocean-warming, low-oxygen zones and noise pollution. The aquariums support a wide range of research, including investigations into heatwaves' effects on shellfish, invasive seaweed species, carbon sequestration in kelp forests, sleep physiology in fish and the health of farmed salmon.

Unlike public aquariums, the Schuler Laboratory is strictly for research, complementing the laboratory's research vessel and analytical labs. Seawater is pumped from the adjacent Goat Island Marine Reserve into tanks that can be configured for various experimental needs, including temperature-controlled and sound-damped rooms. The facility also features external tanks supplied with environmentally controlled seawater.

Professor Conrad Pilditch, head of the Institute of Marine Science, described the laboratory as a major advancement for understanding ocean life.

Research/funding

Oceans heating faster in two bands stretching around the globe

New research led by University and National Center of Atmospheric Research climate scientist Dr Kevin Trenberth reveals that the world's oceans are heating most rapidly in two distinct latitudinal bands – one in the Southern Hemisphere at 40–45° south, and the other around 40° north. The Southern Hemisphere band, which includes waters around New Zealand, Tasmania and the South Atlantic, is experiencing the fastest warming globally. The Northern Hemisphere band shows similar trends in coastal waters east of the United States and Japan.

Trenberth said the findings were "striking" and that it was unusual to discover such a distinctive pattern jumping out from climate data.

The study, published in the *Journal of Climate*, analysed ocean temperature data from 2000 to 2023, using one-degree latitude strips down to 2,000 metres depth. The findings suggest that these heat bands have developed alongside poleward shifts in jet streams and ocean currents. The warming is not uniform; notably, the subtropics near 20° latitude showed little change in both hemispheres.

Trenberth emphasised that climate change is arising through the excess heat from the build-up of greenhouse gases ending up in the ocean.



Dr Kevin Trenberth

Research/funding

The secret lives of NZ's Hector's and Māui dolphins

Hector's and Māui dolphins are endemic to Aotearoa New Zealand. Māui dolphins are classified as critically endangered, with an estimated population of fewer than 100 individuals. Hector's dolphins, while more numerous, are also considered nationally vulnerable. Both species face ongoing threats from fishing by-catch, habitat degradation and marine noise pollution.

A University research team has been leading a groundbreaking research project to help better understand and protect these small dolphins. Their work includes population monitoring, genetic analysis and the study of dolphin behaviour and habitat use.

Most existing knowledge of the Hector's and Māui dolphins derives from above-water interactions. However, the research team has used innovative technology in the form of multi-sensor digital archiving tags (DTAGs), which attach using small silicon suction cups, to 'see' beneath the surface and reveal new insight into the mammals' underwater behaviour.

Already the team learned that these dolphins are travelling farther offshore than previously thought, as well as venturing into fishing zones.

The dolphin tagging project is one of several supported by donations made through the University's appeals programme.



Our people

Professor Andrew Jeffs on sustaining New Zealand's blue economy

Marine scientist Professor Andrew Jeffs has been exploring sustainable ways to maximise the economic potential of the sea.

Aotearoa controls the seventh-largest maritime area in the world, 15 times larger than its land area; the blue economy contributes billions in economic activity to Aotearoa.

While New Zealand benefits greatly from its coasts, there is a dissonance between Kiwi values and behaviours. Our oceans are suffering from pollution, affecting the future potential to sustain our seafood consumption, export potential and our recreational enjoyment of the sea.

Jeffs highlights the need for innovation and science-led solutions to ensure the long-term viability of marine industries while protecting ocean ecosystems. He is a two-time winner of the Velocity Ideas Challenge, the Centre for Innovation and Entrepreneurship's flagship start-up ideas competition. He has also secured grants from the Ministry of Business, Innovation and Employment to progress innovations.

New Zealand's blue economy consists of fisheries and aquaculture, marine tourism, recreation and more. It employs approximately 70,000 people and represents a vital part of the country's economic and cultural identity. Yet, as Jeffs points out, it faces significant challenges. Sediment runoff from land-based activities such as farming, forestry and urban development is degrading coastal ecosystems, leading to murky waters, diminishing fisheries and vanishing shellfish beds.

Jeffs advocates for a shift towards more sustainable practices, such as low-impact aquaculture and ecosystem-based management. He also highlights the significant role of iwi in fisheries and the blue economy and the integration of Māori cultural practices, such as kaitiakitanga, into resource management.

A passionate advocate for education and outreach, Jeffs believes in the power of informed communities. "Engagement is critical." Iwi and community groups are credited by Jeffs for stepping in to fill public-policy voids through rāhui (restricting access to natural resources for conservation reasons) and local restoration efforts. For example, new protected areas for the Hauraki Gulf have been over a decade in the making, and despite broad stakeholder agreement to their placement, they still aren't fully in place. Meanwhile, iwi and community groups are leading the charge by installing rāhui, fighting invasive exotic seaweeds and restoring shellfish beds.

Much remains to be done to support the health of our oceans and, in turn, the prosperity of the blue economy through research, policy and social and corporate behaviour. Jeffs encourages people to explore options by developing their own innovations and engaging with community groups.



Professor Andrew Jeffs (right)

Research/funding

Sand slips away, but CoastSat keeps the score

University researchers have developed CoastSat New Zealand, a powerful new tool that uses satellite imagery to monitor Aotearoa's coastlines for erosion and makes online beach monitoring possible for the entirety of New Zealand.

The tool enables detailed, nationwide tracking of shoreline changes, offering monthly updates and historical data dating back to 1999. It provides a visual map of New Zealand's coastlines, highlighting erosion hotspots in dark red and allowing users to click on specific locations for in-depth information.

Led by Professor Giovanni Coco from the School of Environment, and software engineer Nick Young from the Centre for eResearch, the project built on open-source software originally developed by scientists at the University of New South Wales. CoastSat uses Google Earth Engine to access a vast archive of publicly available satellite images, enabling large-scale, long-term analysis of beach dynamics.

Currently designed for specialists, the tool supports coastal science, conservation, and management by identifying areas of concern and informing decision-making. For example, it shows significant erosion at Port Waikato and accretion at Whatipu. Coco described CoastSat New Zealand as a "game-changer" for anyone involved in coastal science or management.

Research/funding

Whale song and human language share same structure

A remarkable similarity in how humans and whales communicate has emerged. An international research team has revealed that humpback whale songs and human language share the same language structure, with the way whales organise their vocalisations following hierarchical patterns close to those used in human speech.

Dr Emma Carroll, a marine biologist in the Faculty of Science, was co-author of the breakthrough paper, published in the journal Science.

The scientists analysed the groans, moans, whistles, barks, shrieks and squeaks in humpback whale song recordings collected over eight years in New Caledonia. They used computational models typically applied in linguistics and discovered that the whale songs are composed of units that combine into phrases and themes, forming a complex structure that mirrors the syntax of human language. This hierarchical organisation allows whales to produce long, elaborate sequences of sound with internal rules and patterns.

Across human languages, the most used word appears about twice as often as the second most common word, three times as much as the third most common word and so on. This is called Zipf's Law. The words used most frequently are very short, such as "the", "of", and "and". Dividing the whale song into segments, the researchers found the same rules of frequency and brevity apply.

The findings suggest that complex communication systems may not be unique to humans and could have evolved independently in other species. The study also highlights the cognitive sophistication of whales.



Dr Emma Carroll

Data Snapshot

The Institute of Marine Science

Marine vessel operations

In 2025, the institute's vessel **Te Kaihōpara (The Explorer)** spent 92 charter days at sea. Although the boat was booked for most of the year, operations were constrained by safety protocols and research requirements, with prevailing weather conditions significantly affecting the number of days available for fieldwork (around 77 days were cancelled due to weather).

Educational outreach

In 2025, the **Goat Island Marine Discovery Centre** delivered a wide range of educational activities:

- **Centre-based programmes:** 129 individual education programmes, reaching **5,500 students**.
- **Specialist workshops:** Three full-day specialist education workshop, involving **120 students**. One multi-day workshop focused on educating secondary school teachers.
- **Off-site education days:** Three multi-day educational programmes spanning North and South Island schools, involving **60 students**.
- **Passive visits:** An estimated **3,000 visitors** engaged with the centre outside of formal education programmes.
- **Geographic Reach:** From Taipa Area School in Northland to Marlborough Girls High School in the South Island.



Associate Professor Kristal Cain

Sustainable Development Goal 15

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss



Research publications in 2025	
129	Number of University of Auckland publications
19%	Share of New Zealand papers

Research/funding

Unlocking animal senses

Researchers at the University of Auckland are uncovering the hidden sensory worlds of animals, offering new insights into how our fellow creatures perceive and interact with their environments. The research highlights how human activities can disrupt animal behaviour and the importance of considering animal senses in conservation.

Practice, patience and a keen eye are needed to spot the titipounamu (rifleman), New Zealand's smallest bird, whose green and brown plumage appears camouflaged to predators. These colours blend into the bush for humans and many animals. However, titipounamu see each other in vibrant ultraviolet hues – flashing purples, pinks and golds. Associate Professor Kristal Cain and her team studied these birds in the Mangaharuru Range and Zealandia sanctuary, finding that both males and females use a range of habitats, not just those matching their plumage. To each other, their eye rings and wing patches glow in ultraviolet, serving as a "double act" of camouflage and conspicuous signalling. For titipounamu, this "techno-colouration" likely plays a role in communication and mate attraction.

Meanwhile, Cain and colleagues studied the impact of noise pollution on New Zealand's short-tailed bats by playing road noise in forests and monitoring bat activity. Bats do have eyes, but they primarily navigate the world via echolocation, emitting high-frequency sound pulses through their nose and mouth and listening for the echo. They found that bats avoid noisy areas, likely because the noise interferes with their ability to navigate or hunt.

Associate Professor Anne Gaskett studies how animals, flowers and fungi perceive their environments, and how colour and scent influence animal behaviour. New Zealand forests are rich in brightly coloured fruits and fungi, which may have evolved to attract a range of animals, not just birds but also skinks, geckos and wētā. Gaskett argues that fully understanding how a forest works requires considering the sensory perspectives of the animals within it, together with the seasonal availability of fruits and flowers. Under Gaskett's supervision, doctoral student Jung Su Lee has been investigating which colours and scents attract native skinks at Auckland Zoo, with implications for their survival in the wild.



Associate Professor Anne Gaskett and Dr Ariel-Micaiah Heswall

Dr Ariel-Micaiah Heswall, working with Gaskett and Cain, investigated how artificial city lighting affects seabirds in northern New Zealand. By mapping seabird collision sites against light pollution data across Auckland, Heswall found a clear link: brighter areas had more bird crashes. Cooks' petrels are especially vulnerable, with fledglings often colliding with city lights during their first flights each March, leading to injury or death. Grounded birds face further risks from predators and vehicles. The team planned to trial light-dimming strategies with local businesses.

In a related study, Heswall analysed by-catch data and museum specimens, discovering that seabirds with larger eyes and nostrils are more frequently caught by fishing gear.

Marine scientist Professor Craig Radford has been investigating how sharks sense sound and how human-made noise may impact shark behaviour and marine ecosystems. Using MRI scans of by-catch specimens, the research examined the ears of dozens of shark species from the Hauraki Gulf. The findings revealed that ear size is linked to hearing ability and habitat: sharks that spend more time in the water column, like rig sharks with large ears, have better hearing, while bottom-dwellers, like carpet sharks, have limited hearing. The diversity in ear structure reflects the wide range of shark lifestyles and environments. In the ocean, sound is crucial for navigation and survival, travelling much faster and further in water than in air.

Our people

Misha Vorobyev: investigating animals' colour vision

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

Vorobyev, a senior lecturer in Optometry and Vision Science, is internationally recognised for his research into animal colour vision. His work explores how animals perceive and use colour to communicate, camouflage and survive. From flowers and frogs to reef fish and octopuses, Vorobyev's studies span species and continents, revealing the evolutionary and ecological significance of colour.

Originally from Russia, Vorobyev's fascination with the natural world began during childhood field trips with his father, a molecular biologist. Although advised to study physics or chemistry to pursue biology, he later combined these disciplines in a PhD and research career that has taken him to Germany, the US, Australia and New Zealand.

His early research, supported by a Humboldt Fellowship, showed that flowers adapted their colours to maximise their attractiveness to bees' pre-existing colour vision, rather than bees evolving to detect flowers.

One of Vorobyev's most notable contributions is the discovery that primates' third photoreceptor (a channel for conveying colour information), which is absent in most mammals, evolved to detect fruit against foliage, explaining its retention through natural selection.

His work also includes studies on poison dart frogs, whose vivid colours warn predators and attract mates, and reef fish, whose colours serve both camouflage and courtship.

More recently, in New Zealand, Vorobyev investigated how colour-blind octopuses achieve camouflage. He has also been exploring how AI-controlled lighting on fishing gear could reduce bycatch, benefitting the fishing industry as well as creating better environmental outcomes.

His research continues to be driven by a deep appreciation for the beauty and mystery of the natural world.



Dr Misha Vorobyev

Operations

Understanding and enhancing biodiversity within our estate

The University of Auckland is taking meaningful steps to enhance biodiversity across its estate. With input from Professor Bruce Burns from the School of Biological Sciences, it is building a clearer picture of campus biota through Burns' iNaturalist citizen science project, which captures flora and fauna sightings on our campuses and ecological reserves.

Planning and Capital Projects team members are also incorporating biodiversity considerations into campus development as part of aligning their practice with new Sustainable Design and Delivery Guidelines. These considerations include ensuring project boundaries extend to non-built environments, setting targets for biodiversity net gains within projects, applying landscape and site design to all projects where possible, prioritising native planting and supporting bird corridors and sensitive species.

Our people

The University's surprising biodiversity

Hundreds of different species find a home in the heart of the City Campus. Associate Professor Bruce Burns, from the School of Biological Sciences, is championing the protection and celebration of biodiversity on the University's grounds.

Pre-1840, the area in front of where Old Government House (OGH) now stands was a potato field. It was bordered on the north by a flax colony in an area where flax still grows today.

Among the historically significant plants is the *Pennantia baylisiana*, once considered the world's rarest tree, and now thriving thanks to conservation efforts that began in the 1950s and culminated in successful seed production in 1985. Burns says the survival of the tree is a reminder of the interdependence of plants and people.

Other rare specimens include *Metrosideros bartlettii* (rātā moehau), a white-flowering relative of pōhutukawa, one of just 14 examples surviving in the wild.

Some of the trees on the OGH grounds were planted by prominent historical figures, such as Governor George Grey (*Erythrina afra*; coast coral tree) and Prince Alfred (the prominent 50-metre Norfolk pine, planted in 1869). Queen Elizabeth II and Sir Edmund Hillary are among other notable figures who have also planted trees.

In 2018, Burns launched a citizen science initiative encouraging staff, students and visitors to record species sightings on campus. By April 2025, the project had logged 3,794 observations from 392 contributors, identifying 1,321 species ranging from plants and fungi to birds and insects.

Burns regularly uses the OGH grounds for teaching and research, and he has a mine of fascinating stories to go along with the variety of specimens that grow there. He describes City campus as a "green oasis" and stresses the University's responsibility to maintain and enhance its biodiversity.

Our people

A new era in conservation

New Zealand is one of the only countries in the world with no large mammalian predators. Because our native birds, frogs, lizards and plants have evolved in isolation, they lack the vital defence behaviours needed for survival against introduced predators including cats, possums, rats and stoats. Many native species are now threatened with extinction.

Dr Katerina Taškova leads innovative research that applies artificial intelligence (AI) to ecological conservation. Her work incorporates reliable machine learning, spatial temporal data mining and computational sustainability, which she can apply to create AI solutions to solving global environmental problems.

Taškova has been working towards New Zealand's Predator Free 2050 initiative, which aims to eliminate invasive predators within the next 25 years. She co-led the Biosecurity Technology Spearhead Research Project, tasked with developing new, impact-driven biosecurity technology.

The project team developed a swarm of smart, networked sensors capable of detecting predators in remote and complex landscapes. Unlike conventional surveillance methods that rely on stationary devices, this system uses mobile, AI-powered sensors that can be deployed and serviced by drones.

Māori researchers associated with the project created a framework for mātauranga Māori co-design of ngahere technology, which was used to inform the shape, colours and materials of the drones. Inspiration was taken from traditional practices like weaving and carving. The same approach can be used to inform the design of the sensing devices, including the algorithms for predator detection and predator search strategies.

The project formally concluded in June, but testing is ongoing, thanks to the co-funding from Predator Free 2050 Ltd.

Beyond terrestrial ecosystems, Taškova is also tackling marine threats. She has been co-leading a project to monitor the spread of long-spined sea urchins, which are decimating kelp forests in New Zealand and south-eastern Australia. Using machine learning, her team has been leading the development of a machine-learning toolbox that will enable rapid surveillance of kelp forest changes.





Dr Justin Sobion

Sustainable Development Goal 16

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



Research publications in 2025	
128	Number of University of Auckland publications
24%	Share of New Zealand papers

Our people

Law scholar fights for island nations in landmark climate case

Dr Justin Sobion, a recent University of Auckland law graduate, represented the nations of Grenada, and Saint Vincent and the Grenadines, at the world's highest court in a landmark climate-change case.

The proceedings, heard in the International Court of Justice (ICJ), sought to clarify the legal obligations of states to address climate change. ICJ judges heard from 96 countries and 11 inter-governmental organisations.

Sobion argued that states have a fiduciary duty to act as trustees of the climate system for present and future generations. His advocacy highlighted the disproportionate impact of climate change on small-island nations and the moral responsibility of major polluters. He emphasised that no state owns the atmosphere and called for collective action to restore the degraded climate system. His arguments drew on international law principles and scientific evidence, including projections of severe climate risks for small-island states, even at 1.5°C warming.

The case was initiated by a youth-led campaign and supported by coordinated efforts from Caribbean and Pacific nations. Sobion's involvement began in 2021, while he was a University of Auckland scholar, and culminated in his appearance before the ICJ in December 2024. He described the experience as a career-defining moment and expressed hope that the advisory opinion, while not legally binding, would influence future climate negotiations.

Engagement

High Court backs legal challenge to crayfish catch limits

In February 2025, New Zealand's High Court upheld a legal challenge against a 2023 decision by the former Minister for Oceans and Fisheries regarding crayfish catch limits in Northland. The case, brought by the Environmental Law Initiative (ELI) in partnership with local hapū Ngāti Hau and Ngāti Kaharau, argued that the decision failed to address the ecological imbalance caused by overfishing of crayfish, a key predator of kina (sea urchins).

The court found that none of the options presented to the then-Minister Stuart Nash adequately tackled the kina overpopulation, which has devastated kelp forests and coastal ecosystems.

University of Auckland marine scientist Professor Andrew Jeffs said in late 2024 that the science overwhelmingly supports closing areas of the ocean to fishing for crayfish; this would allow the crayfish numbers to increase and eat enough kina so that kelp can recover.

Jeffs, and Associate Professor Nicholas Shears, provided expert evidence supporting spatial closures to allow crayfish populations to recover. They criticised the decision paper for lacking scientific rigour and failing to consider the role of hapū in marine stewardship.

The ruling marked the second successful ELI challenge to Fisheries New Zealand decisions. The High Court called upon the Ministry to take decisive action to address the kina populations.

Engagement

Citizens' Assemblies – the power of deliberative democracy

Citizens' Assemblies – ordinary people gathering to make tough political decisions – are gaining traction in a world where traditional democracy is under fire.

Back in 2022, Auckland hosted New Zealand's first official Citizens' Assembly, where 40 randomly selected residents deliberated over the city's future drinking water strategy. Over five weekends, participants engaged with experts to understand complex water issues and ultimately recommended recycled wastewater as a viable solution. Auckland Council's Watercare has since commissioned a pilot plant based on their preferred option.

The assembly exemplifies deliberative democracy; a model where informed citizens collaboratively make decisions. Initially met with scepticism, the process proved effective, with participants quickly grasping technical concepts and challenging expert views. The assembly's credibility lies in its grass-roots nature, offering a democratic mandate for potentially controversial decisions.

The initiative draws parallels with international examples, such as Ireland's abortion reform and climate assemblies in France and the UK. Locally, Māori decision-making traditions – grounded in tikanga and consensus – mirror the deliberative approach.

The Citizens' Assembly not only influenced infrastructure planning but also demonstrated the potential of participatory governance in restoring public trust and enabling transformative change in tackling issues like climate change and resource management.

Data Snapshot



Students graduating with law-related qualifications (2025)

678

6%

Number of graduates from LLB/ LLM and criminology

11,766
Total number of graduates

Research/funding

Child abuse: research to help end redress failures begins

An international research initiative led by legal experts has been underway to address persistent failures in justice and financial redress for survivors of institutional child sexual abuse. By examining lessons learned from significant inquiries in Aotearoa New Zealand, Australia, England and Wales, the study seeks to develop a framework to assist governments in effectively addressing institutional abuse.

The University's Professor Jodi Gardner has been one of the legal experts, amongst an international contingent, leading the research.

The initiative responds to long-standing government inquiries, such as New Zealand's Royal Commission into Abuse in Care, Australia's 2017 Royal Commission and the 2022 Independent Inquiry in England and Wales. The timing was ideal for critically analysing these inquiries at their different stages to feed back to all three jurisdictions.

Central to the project was a September 2025 workshop that would convene commissioners, judges, victim advocates and academics to examine legal and practical barriers to redress. The new framework will integrate victims' voices and interdisciplinary research from social policy, criminology and psychology to ensure it is both legally sound and sensitive to survivors' needs.



Professor Jodi Gardner

Our people

Boyd Swinburn wins Critic and Conscience Award

Professor Boyd Swinburn was the 2025 winner of the Critic and Conscience of Society Award for his research and public advocacy aimed at preventing the harm caused by unhealthy food, alcohol and tobacco.

The award recognised Swinburn's long-standing advocacy for evidence-based health policy. A professor of population nutrition and global health, his research into obesity led to the concept of the 'obesogenic food environment', highlighting how systemic factors shape dietary behaviours.

Swinburn was honoured to accept the award, which he emphasised reflected not only his personal work but also the collective impact of Health Coalition Aotearoa (HCA), which he founded. HCA provides a platform for academics to contribute to public discourse and policy, amplifying scientific voices through collaboration. It comprises 75 member organisations and expert panels focused on tobacco, alcohol, nutrition and public health infrastructure.

Among the campaigns HCA had underway in 2025 were: reinstating progressive tobacco-control legislation; improving public policymaking by reducing vested-interest influence; and expanding the Ka Ora, Ka Ako healthy school lunch programme.

Swinburn leads an international network (INFORMAS) in more than 60 countries to monitor and benchmark the healthiness of food environments and the implementation of food policies and actions to reduce obesity. He established the World Health Organization's (WHO) first Collaborating Centre for Obesity Prevention, at Deakin University in Melbourne, and has contributed to over 30 WHO consultations and reports on obesity.

Our people

Sir Collin Tukuitonga becomes first knighted professor from Niue

Professor Sir Collin Tukuitonga KNZM became the first Niuean to hold both a knighthood and a professorial title, marking a historic milestone in Pacific public health leadership. His inaugural lecture, *An Advocate for Equity*, delivered at the University of Auckland's Fale Pasifika in June 2025, celebrated a lifetime of service, scholarship and advocacy for Pacific communities.

Born in Alofi, Niue, and raised in modest circumstances, Sir Collin's journey from 'Island Rounds' in Niue to the World Health Organization in Geneva was an extraordinary feat.

His career has been defined by a commitment to equity – recognising that some communities require more support than others, and that failing to act on this costs society as a whole.

Tukuitonga has held numerous influential positions, including Director of Public Health for Aotearoa New Zealand and Director-General of the Pacific Community (SPC). He co-founded The Fono, one of New Zealand's first Pacific-led health providers, and has led initiatives addressing cardiovascular disease, cancer and respiratory illness among Pacific peoples.

More recently, as Co-Director of Te Poutoko Ora a Kiwa – Centre for Pacific and Global Health, he has focused on climate resilience, mental health and workforce development. His recent efforts include micro-qualifications for adult learners and the establishment of the Pacific Academy of Sciences.



Professor Boyd Swinburn



Professor Sir Collin Tukuitonga



Sustainable Development Goal 17

Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development

17 PARTNERSHIPS FOR THE GOALS

Engagement

University of Auckland a co-host of global sustainability congress

The University was proud to return as a regional co-host of the Global Sustainable Development Congress, held in Istanbul in June, in partnership with Times Higher Education.

The congress brought together global leaders, researchers and changemakers to drive progress on the world's most pressing sustainability challenges and the role of higher education in shaping a more equitable future.

Vice-Chancellor Professor Dawn Freshwater delivered a keynote speech on the complex realities facing university leaders, including geopolitical tensions, demographic shifts and technological disruption. She also hosted a panel on advancing the Sustainable Development Goals, emphasising the need for accountability and strategic implementation.

Other University delegates included Deputy Dean of the Business School, Andrew Patterson, who joined a panel on harnessing research and innovation to meet urgent energy challenges. The discussion explored how universities can support real-world impact, from building research centres to influencing energy transition policies and carbon pricing frameworks. Professor Niki Harré discussed embedding climate literacy and sustainability into education.

The University showcased a paperless, interactive exhibit featuring virtual-reality experiences and direct engagement with delegates.



The University's stand at the Global Sustainable Development Congress included a virtual-reality experience

Operations

University of Auckland maintains high global rankings for sustainability

The University of Auckland was ranked first in Aotearoa New Zealand and 17th globally in the 2025 QS World University Rankings in Sustainability. Assessed against 1,743 institutions worldwide, the University also placed fourth in Oceania, reflecting its strong regional impact.

It scored exceptionally in environmental education and research, highlighting its leadership in these areas. The University's high environmental impact, social impact and governance scores, reflected its comprehensive approach to sustainability, and a commitment to strong governance practices and ethical organisational culture.

In addition to the QS rankings, the University was 28th-equal in the Times Higher Education Impact Rankings 2025, and also placed in the top 20 for Sustainable Development Goals 7, 10 and 13.

Research/funding

NZ and China team up on preserving coastal wetlands

The University of Auckland last year launched a three-year collaboration with Hohai University and East China Normal University, to improve coastal wetland management in response to rising sea levels.

Led by Professor Karin Bryan from the School of Environment, the New Zealand team is using advanced computer modelling to guide wetland management, including the potential to restore mangroves and saltmarshes on low-lying farmland where sea water is encroaching.

Wetlands play a vital role in protecting coastlines from erosion, supporting biodiversity, reducing flooding and storing carbon. However, New Zealand has lost over 90 percent of its wetlands due to drainage and conversion to farmland.

The sophisticated models developed by the researchers can simulate tide flows, sediment movement and vegetation effects using tools like Delft3D. These models also predict 'blue carbon' outcomes, including carbon burial and emissions.

The collaboration features research sites on wetlands in Northland and Jiangsu province, on China's east coast. The New Zealand site remains relatively intact in its natural state, whereas the China site has been heavily altered.

The University of Auckland researchers were awarded $300,000 from the Ministry of Business, Innovation and Employment under the New Zealand–China Strategic Research Alliance programme. Hohai University and East China Normal University scientists are funded by the Chinese Ministry of Science and Technology.



Research/funding

Agreement with Chinese biotech company to benefit cancer patients worldwide

In late 2024, the University of Auckland signed a major patent acquisition agreement with Guangzhou Salustier Biosciences for LX-132, a novel cancer therapeutic. Approved for clinical trials in China, the compound is expected to significantly advance global cancer treatment.

The drug was co-developed through a long-standing collaboration between the University of Auckland's medical oncology researchers, the Auckland Cancer Society Research Centre, and the Guangzhou Institutes of Biomedicine and Health. This partnership, supported by New Zealand's Ministry of Business, Innovation and Employment, began in 2012 and led to the creation of the China–New Zealand Joint Laboratory on Biomedicine and Health.

The signing took place at the New Zealand-China Enterprise Cooperation Conference held in Guangzhou. The University's Associate Professors Jeff Smaill and Adam Patterson attended the conference, alongside Trade Minister Todd McClay and Auckland Mayor Wayne Brown.

The agreement is one of the largest biopharmaceutical commercialisation deals between the two countries. It may lead to future trials in New Zealand.

Engagement

Student-led Sustainable Development Goals Symposium

A team of Chinese PhD students at the University brought together more than 40 speakers from around the world for a Sustainable Development Goals (SDGs) Symposium held in September 2025.

The central tenet of the symposium was that achieving the SDGs requires collaboration across different fields and cultures.

Discussion topics included inclusive education, gender equality, sustainability in business, climate adaptation and the silver economy. Speakers came from New Zealand, China, Malaysia, Australia, Finland, Italy, Thailand, the Netherlands, India, Brazil and beyond.

The symposium also welcomed distinguished scholars and journal editors, who discussed opportunities for achieving the SDGs through innovation and cross-sector partnerships.

A Te Ao Māori SDG session offered Indigenous perspectives on guardianship, intergenerational well-being and environmental reciprocity.

Juncture: Dialogues on Inclusive Capitalism (a University of Auckland research centre) hosted a session on cross-disciplinary collaboration and ethical leadership in advancing the SDGs.

The symposium was initiated and organised entirely by the doctoral students, and mobilised diverse academic and community resources. Organisations involved and providing support included the New Zealand Asia Institute (NZAI) of The University of Auckland; Auckland Chinese Students and Scholars Association (ACSSA); Auckland University Students' Association (AUSA); Grin Natural; Asia Pacific Science Press; and Fujian Zhongdian Straits Institute of Intelligent Equipment.

The symposium coincided with the annual SDG Flag Day, marked on 25 September.

The University's School of Graduate Studies provided seed funding for the event, through a Creating Connections Grant.



Engagement

Launch of Pacific Islands report brings world experts to Auckland

The University's Te Poutoko Ora A Kiwa (Centre for Pacific and Global Health) and the Centre for Asia-Pacific Resilience and Innovation (CAPRI) launched their report *Sustainability and Resilience in Pacific Island Health Systems* at the Pacific Medical Association headquarters in November 2024.

The report highlights the unique and interconnected challenges faced by Pacific Island Countries and Territories (PICTs), including unreliable and expensive transport, small and fragile economies, and vulnerability to climate change.

Authored by Professor Sir Collin Tukuitonga and other regional experts, the report evaluates health systems across seven domains: population health, environmental sustainability, workforce, medicines and technology, service delivery, financing, and governance. Key findings point to gaps in workforce capacity, health system financing and governance.

The report calls for increased national investment, coordinated regional policies, and stronger global partnerships to build resilient health systems. Climate change is identified as the most pressing threat to Pacific livelihoods, despite the region's minimal contribution to global emissions.

Speakers at the launch included the University's Professor Sir Collin Tukuitonga and Sir Ashley Bloomfield, former Australian Prime Minister and CAPRI International Advisory Council chair Malcolm Turnbull, founder and chair of CAPRI Professor Syaru Shirley Lin, and Dr Siale 'Akau'ola, Tonga's Minister of Health.

Engagement

University launches inaugural Pacific Strategy

The University of Auckland launched its first Pacific Strategy in June 2025. *Ala o le Moana* (2025–2030) marks a milestone in its 142-year history.

Developed under the leadership of Pro Vice-Chancellor Pacific, Professor Jemaima Tiatia-Siau, the strategy is a bold framework designed to amplify the strengths of Pacific learners, staff and communities. Its name, meaning 'pathways of the ocean', symbolises Pacific peoples' deep history, navigational expertise, and resilience. The strategy was shaped through 15 months of extensive collaboration, including talanoa with Pacific communities, church leaders, youth and strategic partners.

Its five key priorities are Pacific excellence in the domains of research; innovation and entrepreneurship; teaching and learning; service; and leadership. The strategy aligns with the University's broader goals under *Taumata Teitei – Vision 2030 and Strategic Plan 2025*.

The launch event, held at the Fale Pasifika, was attended by dignitaries and guests from around the country.



The Pacific Strategy adopted the Fijian name for the frigatebird, manumanu ni cagi (bird of the winds)

About this report

This report summarises a range of activities that Waipapa Taumata Rau, University of Auckland undertakes to contribute to the Sustainable Development Goals (SDGs). These activities all relate in some way to one of the core elements of the University's function, spanning research, teaching, operations, engagement and partnerships. We have built the report with quantitative research metrics and qualitative case studies.

The University has continued to work towards reducing inequalities, poverty, and hunger among our staff, students and the wider community, as well as contributing to solutions for a wide range of social, economic, environmental and health-related challenges.

This year's report is a selection of our activities and initiatives, capturing both our ongoing commitment to addressing a variety of global challenges, as well as a range of other activities that we have adapted to suit current needs. We are 100 percent committed to the SDGs and believe their underlying principles are more relevant than ever in the current global climate.

SDG metrics

Publication-related metrics are reported for each SDG using the Elsevier tagging that can be found in their Scopus / SciVal family of academic data products. These provide an externally validated, internationally accepted method of quantifying our contributions to research supporting the SDGs.

Case studies

Striving to pick a range of initiatives from across the University, we shortlisted a diverse set of case studies based on comprehensive consultation with key stakeholders undertaking these activities. These case studies cover examples of research, funding, engagement, operational initiatives and the recognition of excellence in our staff and students. They were chosen because they highlight clear contributions to the respective SDGs involved.

This SDG report lists but a selection of the many initiatives undertaken by the University of Auckland. Our news and sustainability website pages are regularly updated with the latest information about initiatives and activities towards SDGs. The University has a Sustainability Strategy, *Te Rautaki Aronga Toitū*, as well as a Net Zero Carbon Strategy, *Te Taumata Tukuwaro-kore*. Both of these documents can be found on our website.

University Impact Rankings

The 17 Sustainable Development Goals (SDGs) were established in 2015. They set a 15-year agenda and call to action for all countries to end poverty, fight inequalities, and build peaceful, just and sustainable societies by 2030.

Launched in 2019 by Times Higher Education (THE), the University Impact Rankings measure how universities worldwide are performing against the SDGs. The University of Auckland has consistently ranked within the top two percent globally in all ranking years to date. These outstanding results recognise and reaffirm the University of Auckland's strong commitment to sustainability and making a positive social impact through its partnerships, research, teaching, operations, community engagement and knowledge transfer. In 2025, 2,318 universities were ranked, compared to 1,963 in 2024, showing the growing global importance of the SDGs to institutions and their staff and students.

Sustainable Development Goal (SDG)	Our rank 2025
Overall ranking for impact	**28**
SDG 1: No poverty	**81**
SDG 2: Zero hunger	**101–200**
SDG 3: Good health and well-being	**48**
SDG 4: Quality education	**101–200**
SDG 5: Gender equality	**26**
SDG 6: Clean water and sanitation	**24**
SDG 7: Affordable and clean energy	**11**
SDG 8: Decent work and economic growth	**101–200**
SDG 9: Industry, innovation and infrastructure	**59**
SDG 10: Reduced inequalities	**20**
SDG 11: Sustainable cities and communities	**101–200**
SDG 12: Responsible consumption and production	**34**
SDG 13: Climate action	**14**
SDG 14: Life below water	**55**
SDG 15: Life on land	**54**
SDG 16: Peace, justice and strong institutions	**58**
SDG 17: Partnerships for the goals	**96**

1 In some cases, we are ranked in band 101–200. The specific rank for institutions within that band are not published.

2 Institutions can submit on any combination of SDGs, but not all submitters will be eligible for overall ranking. For example, there are more submitters on SDG 17 (2,389) than for the overall ranking (2,318).

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