

Vice-Chancellor's Report to Council



The 2022 academic year is drawing to a close, with all teaching ending in the third week of October. At this time students are preparing for examinations and assessments. Typical as the end of the year approaches this report covers the past month and also reflects on the past year.

The University of Canterbury began the 2022 academic year during a time of COVID-19. The impact of the pandemic has been significant, with many students and staff facing challenges. The University has worked hard to support our community through this difficult time, and we are proud of the resilience and adaptability shown by all.

Higher Education (THE) institutional ranking again mainly attributable to citations relative to other universities. However, UC is still in the top 3% of universities globally.

UC has shown a more positive trend in the Impact Rankings. In the THE Impact Rankings, the University achieved first in the world for action on the United Nations Sustainable Development Goal (SDG) 12: Responsible Consumption and Production. We also achieved 50th in our Impact Ranking in the world overall and second in Aotearoa New Zealand. In October the inaugural QS Sustainability ranking was published placing UC as 95th globally, and third in New Zealand. Auckland and Otago were ranked globally at 10th and 47th, respectively, with Victoria University in Wellington and Massey ranked at 116th and 125th. It assessed a mix of research impact, reputational surveys, institutional policies, and sustainability operations across three environmental scores and five social scores,

These recent results from the two major international institutional ranking scheme run by QS and THE, places UC ranks 2nd, 3rd, 4th and 7th within the New Zealand Universities. Both the QS and THE will be changing their respective methodologies for the 2024 institutional rankings to be released next year.

The establishment of the Office of Treaty Partnership

Adrian Paul is a contributor and co-author of the Borrin Foundation's report on 'Inspiring National Indigenous Legal Education for Aotearoa New Zealand's LLB degree' which is working separately but in parallel with the CLE.

With the lifting of COVID-19 restrictions, Te Pae Rakahau Knowledge Commons regained momentum when UC signed a Memorandum of Understanding with the Police earlier this month. In addition, UC staff and students have been deeply engaged in supporting initiatives of the regional economic development agency led by ChristchurchNZ. This agency has four main economic development clusters: Aerospace and Future Transport; Food, Fibre and AgriTech; Health Tech and Resilient Communities; and High-Tech Services.

UC staff and students were prominent at New Zealand's Aerospace Summit and UC was also a sponsor of the recent Christchurch Aerospace Challenge to support new innovations and potential commercialisation in aerial imaging for local and regional disaster and natural hazards planning. Associate Professor Wolfgang Rack (Gateway Antarctica) was a finalist in the challenge with a proposed innovation for remote and autonomous snow-depth mapping.

Throughout the year, current and former UC staff have continued to have an impact on local, national and international policy making.

As part of a large body of work contributing to the success of the national and global COVID-19 response, a range of UC academics published research into the pandemic and key academics lead national discourse and modelling of the progress of the pandemic. Notable academic contributors have been Professors Alex James and Michael Plank as key members of the national team of scientists at award-winning research centre Te Pūnaha Matatini, which provided a series of mathematical models informing the Government's efforts to combat COVID-19.

There are several other UC contributors. The latest special issue of the *Journal of Health and Wellbeing*, edited by UC's Associate Professor Malcolm Campbell and Professor Robin Kearns (University of Auckland), takes a look at the pandemic geographies in Aotearoa New Zealand. The special issue features contributions from several School of Earth and Environment geographers (and their UC colleagues) with expertise in the geography of health and wellbeing.

As part of a report in the *Journal of Health and Wellbeing*, postdoctoral research fellow Dr Leighton Watson published the probability of Omicron infection based on the different vaccination statuses of the infecting and infected individuals. His study shows unvaccinated people are 3.1 times more likely to infect others and 2.4 times more likely to be infected than boosted people.

The work of Professor Mark Jermy and Dr Joe Chen from Mechanical Engineering on "Infection Risk Model

Professor Ann Brower's research report from 16 years ago and her ongoing work on high-country land tenure were influential in the passing of the third reading of the Crown Pastoral Land Reform Bill in May 2022. Dr Jarrod Gilbert continued to have an impact through his work such as a major research project funded by the Law Foundation titled "Making Gang Laws in a Panic". He also carried out an evaluation of He Kete, a women's residential drug and alcohol treatment programme, which was funded by the Department of Corrections.

A nationwide study led by Public Health Senior Lecturer Dr Matt Hobbs shows that living in areas that have

Over 4,000 aspiring university students and their whānau from across Aotearoa attended UC's Rēwhakaiti | Open Day on Friday 9 September. This is the first time Rēwhakaiti has been held in person since 2019 due to COVID-19 restrictions. Students and whānau explored campus, attended subject briefings and got all the information they needed to be able to confirm their study at UC.

Tauhere | UC Connect, UC's popular free public lecture series, continues to offer topical, educational public lectures by experts in their fields and leading thinkers. Nine talks are available online.

It is gratifying to see the students and staff come to the end of an academic year that started off with COVID-19 impacting learning and teaching yet again. All our students and staff worked together, using a multimodal approach to providing an accessible and flexible educational experience. The start of the teaching year coincided with Omicron variant becoming more prevalent in New Zealand. This resulted in many students having to isolate and negotiate a range of on-campus and online offerings. The teaching staff also had to make changes offering to students in a variety of modes. While the circumstances have been challenging, new innovative teaching approaches have been developed in response.

For instance, newly appointed lecturer in the School of Earth and Environment, Dr Vanessa Bastos, is in the process of setting up a UC-based YouthMappers Club. YouthMappers uses geospatial technologies and a network of universities around the globe to cultivate a generation of young leaders who will create resilient communities.

Despite the challenges, there was a good uptake of new programmes including the Bachelor of Environmental Science with honours (99 students) and the Bachelor of Data Science (70 students). The Faculty of Health welcomed the first cohort of the Doctor of Health Sciences students. In semester 2, the Aerospace Engineering minor in Aotearoa, was launched by Mechanical Engineering Lecturer Dr Natalia Kabaliuk. This year also saw the approval of new programmes to be launched in 2023 including the Bachelor of Digital Screen. As well The UC Business School | Te Kura Umanga was ranked under the Equis system in 2022

Associate Professor Kathryn MacCallum, School of Educational Studies and

The development of early career researchers has continued across the year, with success culminating in the awarding of three Rutherford Fellowships to three innovative women academic leaders, Associate Professor Michelle LaRue, Associate Professor Laura Revell and Senior Lecturer Phoebe Macrae. They are leading ground-breaking research in their respective fields. UC secured 3 of the 12 fellowships awarded nationally with each Rutherford Fellow having five year funding to focus on research.

Digital Services is looking to enable the e-

with Arthur Ellis, Senior Advisor, Elsevier; Anton Muscatelli, Principal and VC University of Glasgow; and Robin Garrell, President of the Graduate centre, The City University of New York.

Two members of our International Relationships Office team, Dr Anna Foster and Monique van Veen, joined Minister of Education the Hon Chris Hipkins at the NAFSA Association of International Educators Conference that took place in Denver, USA in the first week of June. NAFSA is the largest international education conference in the world, and the New Zealand delegation with Minister Hipkins were there to relaunch New Zealand's international education, letting the world know that New Zealand is back open for business.

The Memorandum of Understanding between all eight New Zealand universities and Peking University was renewed this year, seeing the parties formally agreeing to continue hosting the New Zealand Centre at Peking University. Peking is China's leading university, and 2022 marks 15 years of the relationship. The event also highlighted the 50th anniversary of diplomatic relations between China and New Zealand.

UC has progressed a new 120-

Professor Chris Jones and Dr Madi Williams were also successful in bidding to host the Australian and New

rolled out, will provide automated service requests and manage support for facilities, for People and Culture and the Library.

The safety of our buildings remains of paramount importance. In 2022, the Kaikūra field station was demolished for safety reasons. In response to a low seismic assessment of the Pātiaio Kōiora building, the UC Council agreed to the demolition of the existing, relatively new building and its replacement with a three-level building in the same location, which will have a larger footprint but a smaller overall area. This is predominately research-based laboratory facility. A thorough refurbishment of the Ann Ballin building is under way (see the next section).

The University has increased efforts on all fronts to both become more environmentally sustainable itself and support the global push to live sustainably. The UC Sustainability Plan has been published to the Sustainability Office website, making the sustainability objectives of the Tangata Tū, Tangata Ora Strategic Vision 2020–2030 more accessible and transparent.

To advance the University's carbon net neutral goal, a highly complex, multi-year project to remove coal combustion for space heating was approved. Progress has also been made on replacing the University vehicle fleet with new electric vehicles and using artificial intelligence to gain deeper insights into infrastructure utilisation and performance.

More courses relating to the SDGs are now on offer. In addition, UC's new and innovative multidisciplinary Bachelor of Social and Environmental Sustainability degree has been approved, along with the new Bachelor of Environmental Science with Honours.

UC is on track to reduce carbon emissions from coal to zero by 2025 and to become carbon net neutral by 2030, in line with the sustainability aspirations of the UC Strategic Vision. Three large projects are currently under way to support these aspirations: the conversion of the coal boilers on Ilam campus to biomass; the conversion of UC buildings to ground-source heat pumps; and the refurbishment of the Ann Ballin building (formerly the Psychology staff building).

The Ann Ballin building has reached the end of its current working life and will be extensively refurbished to provide modern staff and teaching spaces for a further 50 years. Construction has started and is expected to be completed for the start of Semester 2, 2023. To prepare this building for a low-carbon future, the refurbishment will reduce the energy required to heat the building through incorporating double glazing, upgraded insulation, improved fresh-air systems and low-temperature hot-water radiators. This will be the first retrofitted building at UC with these radiators installed ready to connect to ground-source heat pump systems in the future. A new hospital simulation area will help students develop their bedside psychology consultation skills. Other additions will be two new computer teaching labs, gender-neutral toilets, acoustic and kitchen upgrades and new building services.

The site works for ground-source heat pumps in the area between Matariki and the Science Precinct are now well under way. We have taken the opportunity afforded by their central position on campus to use storyboards and other methods to communicate to students and staff about the SDG that this work supports.

This year the Carbon Neutral Governance Framework was updated to include the following targets: 100% of new buildings to be net zero ready by 2025, 50% of existing buildings to be net zero ready by 2030, and 100% of new buildings to be net zero ready by 2030.

activity. In general, universities in New Zealand are performing better in this programme than many other public bodies.

Sustainability research is growing at UC to the extent that it is not easy to sum up for the year. Areas of research include climate change, political science, psychology, waste, transition energy and hydrogen, land, forestry, and the snow and ice. A small sample of the research is included

The sustainability team has held numerous awareness-raising events during the year including marking Biketober with a large Bike Breakfast, attended by over 150 cyclists from the UC community. Te Ngaki o Waiutuutu (Waiutuutu Community Garden) celebrated its 20th anniversary as one of the oldest community gardens in tautahi Christchurch. Te Rua Makerspace engaged with 90 students at the Sustainability Market, spending a day hosting a stall to show students how the makerspace holds a multitude of resources to reuse, upcycle and be creative with in sustainable ways.

I was privileged to deliver the opening keynote speech at an international webinar on “Climate Change, Security and Sustainability of Ocean States” organised by the Commonwealth Climate Resilience Network (CCRN), an affiliate of the Association of Commonwealth Universities. The CCRN is chaired by Distinguished Professor Steven Ratuva. The significance of the webinar was to raise critical issues of climate security and sustainability in Global South oceanic communities and the role of universities in research to address the challenges of vulnerability, mitigation, adaptation and resilience.

On 28 October we ran our first Sustainability Showcase in partnership with the Christchurch City Council. This public event featured speakers, information stalls and research posters. Mana whenua and Pasifika were well represented through a variety of talks.

Early in the year, a draft Memorandum of Understanding was drawn up between Christchurch City Council and UC on the management of the Waiutuutu | Okeover Stream (including a box drain along a portion of Ilam Fields).

Gateway Antarctica Director, Professor Adrian McDonald hosted a delegation of diplomatic leaders from 15 countries. Delegates toured the Wind Tunnel and the Human Interface Technology (HIT) labs. Professor Jenni Adams explained the 1-square-kilometre Neutrino telescope under the Antarctic ice and how it observes cosmic rays and helps advance theoretical physics. Associate Professor Laura Revell shared her project that confirmed the presence of microplastics in the Antarctic.

UC, together with Lincoln University, reached the finals of the Australasian Green Gown Awards <https://ggaa.acts.asn.au/2022awards/>, which recognise exceptional sustainability initiatives that universities and colleges around the world are undertaking.

Among the many plans underway to celebrate our 150th anniversary in 2023, UC launched a game changer scholarship for South Island students coming from low-decile schools. Previous analysis shows that 80%+ of scholarship recipients come from Decile 8-10 schools. This scholarship required UE but does not filter by grades. Rather, it looks at a student’s determination to give back to their community. Response has been strong and drove a marked increase in applications from schools that do not usually apply to UC. The first cohort of 150 recipients has confirmed for 2023. A second cohort of 150 is planned for 2024. The scholarship provides for tuition fees for the duration of the under-grad degree. A grass roots scholarship appeal will take place asking alumni and staff to donate \$150 for 150 scholarships (x two) for our 150th anniversary.

5 October	Attended a City Dinner in recognition of the 50 th Anniversary of New Zealand – China Diplomatic Relations hosted by outgoing Mayor Hon. Lianne Dalziel
6 October	Met with ChristchurchNZ to discuss the Economic Development Strategy
6 October	Panellist at the 2022 UC Business School – Women in Finance Symposium
7 October	Welcomed Ambassadors and High Commissioners at the UC Gateway Antarctica event to celebrate Antarctic season opening.
9 October	Attended a dinner for women VCs hosted by Professor Wendy Thomson, Vice-Chancellor of the University of London in New York