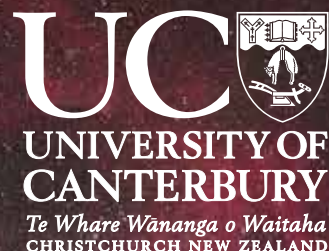


University of Canterbury
Research



IMPACT IN A CHANGING WORLD





Rangahau Research

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Message from Deputy Vice-Chancellor Research & Innovation

Welcome to the University of Canterbury Research Plan

This plan derives from the University's Strategic Vision 2020 to 2030, Tangata Tū, Tangata Ora, in its commitment to producing research that is recognised locally and globally for its quality and positive impact on people and place.

This plan embraces the changing external environment and fast-paced technological advancements and is cognisant of wider government policies, global influences and the challenges facing the communities we serve. The Research Plan positions us well in terms of current government priorities but is centred on the values of UC and long-term societal challenges and goals, whilst being flexible and positioning us to be agile.

The Research Plan provides a framework to invigorate our research performance and standing, through enhanced support for research and researchers and developing more and deeper local and global academic, industry and community partnerships. Of particular importance is strengthening

our partnerships with iwi, hapū, and Māori, to embed Indigenous knowledge into research, and support Indigenous research and researchers. Te Tiriti o Waitangi responsibility obligates research to engage, respect and protect the rights embedded between Māori and other New Zealanders. This expectation requires bicultural competence and confidence across our research community.

The University will continue to facilitate excellence in research, with a focus on mission-driven research hallmarked by measurable impact in our region, contributions to national priorities, and global significance.

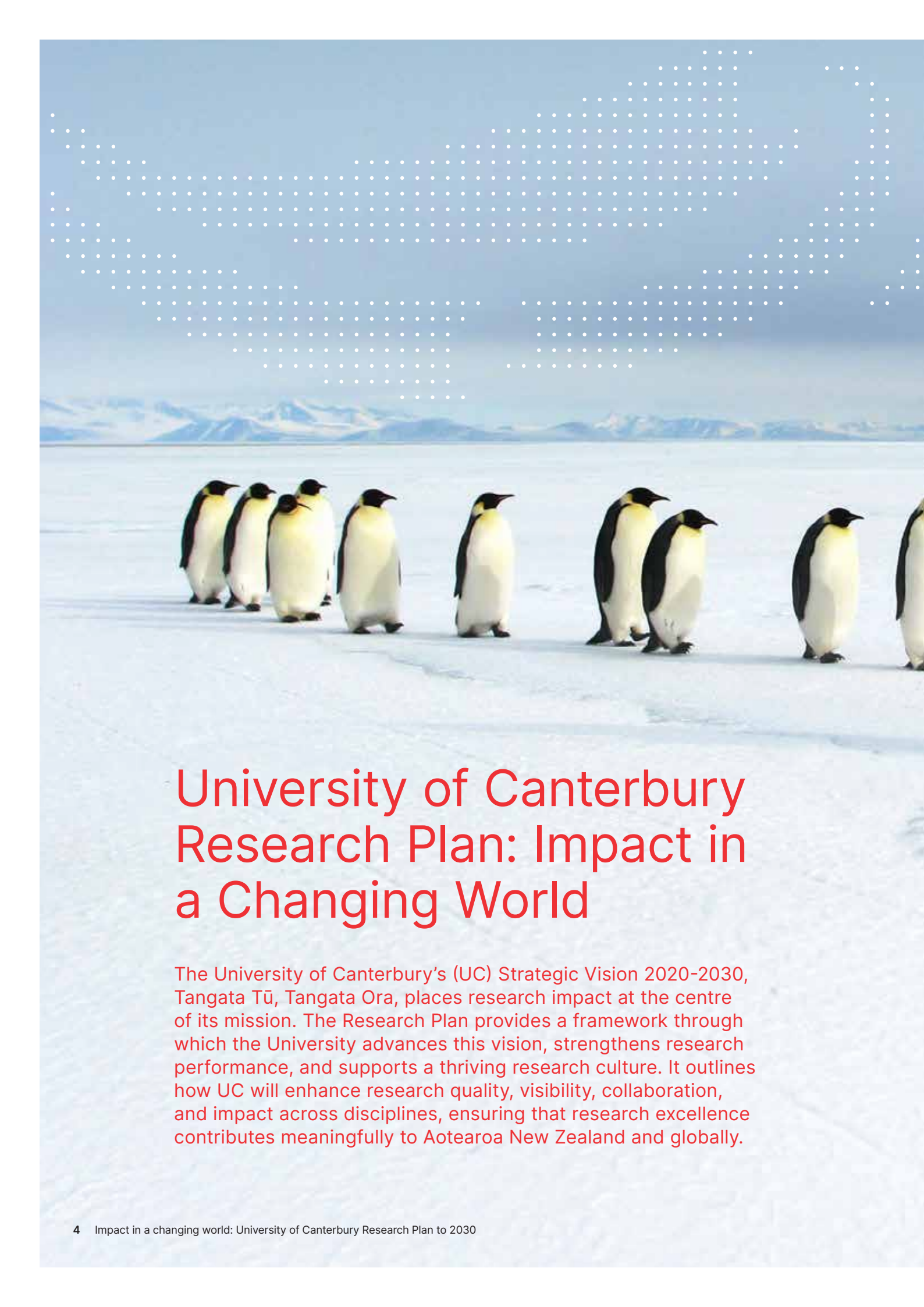
I wish to acknowledge the insights and commitment of my colleagues in developing this plan.

Professor Lucy Johnston

**Tumu Tuarua Rangahau
Deputy Vice-Chancellor Research
and Innovation**

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University of Canterbury Research Plan: Impact in a Changing World

The University of Canterbury's (UC) Strategic Vision 2020-2030, Tangata Tū, Tangata Ora, places research impact at the centre of its mission. The Research Plan provides a framework through which the University advances this vision, strengthens research performance, and supports a thriving research culture. It outlines how UC will enhance research quality, visibility, collaboration, and impact across disciplines, ensuring that research excellence contributes meaningfully to Aotearoa New Zealand and globally.



The Research Plan has been developed in a period of significant change across the national and global research landscape. System-level shifts are reshaping expectations of universities, influencing how research excellence is defined, supported, and assessed. These changes place increased emphasis on research quality, collaboration, visibility, distinctiveness, and demonstrable impact—areas strongly reflected in the Research Plan.

Within this context, the Research Plan sets out how the University of Canterbury will foster a research environment that enables excellent, high-impact research and positions the University as a leader in areas of strategic focus.

Achieving excellence at scale requires sustained strategic focus. Concentrating resources and capability in areas of strength enables the University to deliver high-quality impactful research and advance its research objectives to:

- Support multi-disciplinary research that positively impacts local and global challenges.
- Improve the national and international research profile, reputation, and rankings of the University.
- Increase external funding and diversify funding sources across the University's research portfolio.
- Develop and maintain strong strategic local, regional and international academic and industry partnerships to increase research impact.
- Provide a positive supportive and enabling research environment.

A strategic focus is essential for universities to scale excellence, differentiate themselves, and build a strong research reputation. The Research Plan supports a productive and stable research ecosystem that values the diversity of researchers, disciplines, and approaches. It recognises that excellence is achieved through both concentration of effort and the fostering of collaboration, innovation, and inclusivity across the research community.

Consistent with the University's Strategic Vision, the strategic research priorities focus on research that delivers positive outcomes for local and global challenges. These priorities build on existing strengths and position the University to respond to future societal needs, ensuring that UC research remains relevant, distinctive and impactful in an increasing complex and rapidly changing world.

Research Identity

Central to this framework is the University's Research Identity, which defines UC's distinctive contribution to research locally, nationally and globally. It builds on areas of established strength, interdisciplinary capability, and strategic partnerships, while aligning with emerging opportunities and future societal needs. It reflects a commitment to research that delivers meaningful impact, is internationally connected, and is grounded in relevance to Aotearoa New Zealand.

The University of Canterbury, in partnership with Ngāi Tūāhuriri, is committed to advancing research that strengthens Aotearoa New Zealand's resilience and contributes to global knowledge and innovation. Guided by shared aspirations for flourishing communities, resilient environments, and equitable futures, UC supports impactful, interdisciplinary research across three Research Commitments and a set of Signature Capabilities that reflect the University's distinctive strengths and areas of leadership.

Building on recognised areas of research strength and informed by the University, the Research Identity clarifies what distinguishes UC nationally and internationally. It is grounded in evidence, shaped by place and connected to the people and partnerships that give research its purpose and impact.

The Research Identity enables UC to move beyond broad statements about interdisciplinary collaboration and instead organise its research capability around areas where the University has the depth of expertise, partnerships, and responsibility to contribute at scale. It provides a clear and intentional framework for aligning expertise, investment, and impact.

UC's Research Identity is expressed through three core Research Commitments:

- To strengthen societal & planetary resilience
- To advance sustainable futures through environmental & social stewardship
- To create and harness technology for real-world benefit

These commitments are not simply aspirations. They reflect areas where UC's research already demonstrates depth, momentum and the capacity to make a meaningful difference. They also signal the University's intent to work collaboratively with partners across research, industry, government, iwi, and community settings to address complex challenges and create lasting impact.

These Commitments are underpinned by a set of Signature Capabilities and enabling infrastructures. Together, these elements provide a clear articulation of who UC is as a research institution, what it stands for, and where it is directing strategic investment to enhance capacity, capability, and impact.

Looking to 2030, the global context of research will be shaped by climate disruption, technological acceleration, demographic change, geopolitical uncertainty, and rising expectations for research to deliver tangible outcomes. In this environment, UC is positioned to lead distinctive, high-impact, interdisciplinary, challenge led research.

Through its Research Identity, the University of Canterbury defines its role in addressing these pressures—enhancing societal and planetary resilience, advancing sustainable futures through environmental and social stewardship, and creating and harnessing technology for real world benefit—while upholding its responsibilities to hapū, iwi, and the wider world.

The University of Canterbury, in partnership with Ngāi Tūāhuriri, is committed to advancing research that strengthens Aotearoa New Zealand's wellbeing and contributes to global knowledge and innovation. Guided by shared aspirations for flourishing communities, resilient environments, and equitable futures, UC supports impactful, interdisciplinary research across three core Research Commitments and a set of Signature Capabilities that reflect our distinctive strengths.

Commitments

To strengthen societal & planetary resilience

Transformational need:

Rising complexity and risks demand bold regenerative transitions that enhance environmental integrity, economic resilience, and social equity. Societies must adopt integrated, people-centred approaches that anticipate disruption, support rapid recovery, and enhance long-term wellbeing in a changing world.

UN Sustainable Development Goal alignment



To advance sustainable futures through environmental & social stewardship

Transformational need:

Global climate disruption, biodiversity loss, environmental degradation, and unsustainable consumption patterns require urgent, systemic adaptation, and transformation. Securing long-term planetary health and human prosperity and wellbeing demands sustainable development, aligning governance, social foundations, and collective behaviour with environmental limits.



To create and harness technology for real-world benefit

Transformational need:

Societal pressures and rapid technological transformation demand innovation that is ethical, accessible, and culturally grounded—ensuring technologies serve communities, uphold equity, and enable fair and flourishing futures.



Signature Capabilities

Antarctica & Southern Oceans

Revealing how Antarctica's atmosphere, ice, and oceans shape the global climate, and harnessing that knowledge to support protection and good governance of the world's most extreme and climate critical region.

Biodiversity & Ecosystems

Understanding, protecting, and restoring species and ecosystems to ensure healthy and resilient living systems.

Digital Technologies

Creating advanced digital tools and intelligent systems that support design, creativity, automation, and discovery, advancing the use of digital technology to enhance wellbeing and a sustainable future for all.

Earth, Climate & Atmosphere

Measuring, modelling, and understanding weather, climate, and environmental change in our region and globally to underpin decision making in response to climate change to support future generations.

Language, Literacy & Development

Understanding learning, communication and development across the lifespan to support enhanced individual, community, and societal wellbeing and sustainable future societies.

Materials, Design & Manufacturing

Developing advanced materials, design and manufacturing processes that drive technological progress with real-world impact to improve performance, reduce environmental impact, and deliver safer, more reliable technologies across sectors.

Molecules, Biotechnology & Health

Developing biotechnologies, medical solutions, digital health tools, and molecular innovations that improve human health and wellbeing across the lifespan.

Risk & Resilience

Reducing risk and strengthening resilience for people and places affected by natural and human-made hazards and threats creating safer communities, stronger infrastructure, and enhancing wellbeing.

Space & Aerospace

Advancing new flight and space technologies using cutting-edge flight, earth observation, and launch and orbital innovations alongside astronomy to deepen our understanding of the universe and our place in it. This underpins improved space-use decision-making, and support responsible use of the space environment.

Water, Energy & the Environment

Guiding the sustainable management and governance of water, energy, and environmental resources for future generations, including through using advanced technology and data analysis.

Key Enabling Infrastructure



Digital Research Platforms



Field Stations



Imaging & Characterisation Hub



Structural Engineering Lab

The Research Plan

A woman with dark hair tied back, wearing a white t-shirt and blue nitrile gloves, is holding a clear test tube with both hands and looking at it intently. She is standing outdoors in front of a blurred green background of trees and foliage. A white dotted grid pattern is overlaid on the image, partially obscuring the background and the woman's torso.

The Research Plan is structured into three inter-related pillars that align with the University's values and strategic vision. Together, these pillars provide a coherent and integrated approach to strengthening research performance, enhancing impact, and fostering a vibrant, inclusive and high-performing research culture.

Enhancing research(er) capacity and capability



WHANAUNGATANGA

**He mana tō te tangata
We value people
and their differences**

Lifting research(er) capacity and capability and supporting the development of researchers at every stage of their career and creating an environment that promotes, values and supports research and researchers.

Positioning UC as a local, national and global research hub



MANAAKITANGA

**Kia aroha ki te tangata
We extend care
and empower others**

Positioning UC as a local, national and international research hub through developing and enhancing key partnerships.

Driving the impact of our research



TIAKITANGA

**He kaitiaki tātou katoa
We will enhance and
nurture our resources**

Driving research impact through supporting mission-led research and implementation projects.

Each pillar is supported by a defined set of implementation projects, designed to build capability, focus effort, and deliver measurable outcomes over time. These projects translate the Plan into action, ensuring that strategic priorities are embedded across the University and supported through targeted investment, collaboration, and continuous improvement.

The interconnected nature of the pillars recognises that research excellence is not achieved through isolated initiatives, but through a coordinated approach that brings together people, capability, partnerships, and purpose. This structure enables the University to respond effectively to emerging opportunities while maintaining focus on areas of established strength and future potential.

The three pillars of the Research Plan are:

1. Enhancing research(er) capacity and capability
2. Positioning UC as a local, national and global research hub
3. Driving the impact of our research



PILLAR 1

Enhancing research(er) capacity and capability



Outcome: A research community with the skills, support, networks, and culture required to deliver research excellence and impact.

People are at the centre of the University of Canterbury's research ambitions – its academic staff, research degree candidates, and the professional staff who enable and support research. This pillar focuses on enhancing research quality and impact by strengthening capability and supporting the development of researchers and professional staff at every career stage. It also emphasises the importance of creating an environment that actively promotes, supports, and values research and innovation.

Pillar 1 seeks to strengthen the University's research capability by supporting researcher development, growing future research leaders, enhancing research support systems, and expanding the networks that enable research collaboration and excellence.

Developing the next generation of research leaders is a core component of the Research Plan. The University will focus on ensuring that its research degree programmes are recognised for the quality of their supervision, the strengthening of their research environments, and the opportunities they provide for skills development and broader research experience. This includes access to internships and other forms of professional engagement that prepare graduates for diverse career pathways.

Strengthening the University's research networks is also critical to enhancing capability and extending the reach of UC's research. Greater engagement of UC alumni, adjunct staff and professors emeriti will be fostered to support research activity including through the provision of expertise, research mentorship, and expanded professional networks.

Key Implementation Pathways

Pillar 1: Enhancing research(er) capacity and capability

Align research planning, targets, and recognition

Strengthen research capability and researcher development

Expand and diversify research education and support pathways

Strengthen research partnerships and academic networks

PILLAR 2

Positioning UC as a local, national and global research hub





Outcome: A highly connected and visible research ecosystem that attracts talent, investment, partnerships, and opportunity.

The University of Canterbury's research capacity and capability and research reputation and reach will be enhanced through lifting its research profile and through the strategic use of key relationships and partnerships.

Pillar 2 seeks to enhance the visibility, connectivity, and accessibility of UC research by strengthening strategic partnerships, expanding knowledge exchange, increasing research profile and reputation, and creating clear pathways for external engagement with the University's expertise and capabilities.

Enhancing the research environment requires lifting the profile of the University's research and researchers and the impact of the research at a local, national and global level. This will enhance the research reputation and increase the attractiveness of the University as a research partner. The Plan will enhance the salience of UC research to make the University front of mind for industry and government when they are looking for advice, to contract research or consultancy, or for innovation and research entrepreneurship. The refreshed Research Identity and external facing communications will enhance salience.

Knowledge exchange is the process by which researchers and end users share theories, discoveries, experiences and skills, an expansion of the traditional exchange of ideas that occurs within academia to include the wider community. Enhanced knowledge exchange will complement the enhanced web presence to increase UC's reputation and profile. Example activities include:

- Teaching (including discussing own research).
- External Partnerships – making the link between UC research and research/knowledge users, turning research into practical solutions.
- Socialising Research – translating traditional research outputs for a wider audience (e.g., public talks; media appearances; professional articles; policy development).
- Engaging end-users in research ideation and project planning.

Critical to lifting our research profile and connecting with local, national and global entities is the development of a UC Research Connect Portal – a “front door” – through which external agencies can connect with UC research, expertise, consultancy, infrastructure, and through which UC research and researchers are visible and easily accessible.

Complementing an enhanced research profile is the need for a more intentional, strategic and integrated focus on strengthening external engagement, partnerships, collaborations, and links between UC and industry, other research organisations, government, community, Māori and others. We need strategic partnerships with experts who complement and supplement UC's strengths and provide access to infrastructure and funding opportunities not available at UC. There will be a focus on, and strategic support for growing local, international and industry research partnerships, partnerships that will involve collaboration on research projects and include co-design and dissemination.

Key Implementation Pathways

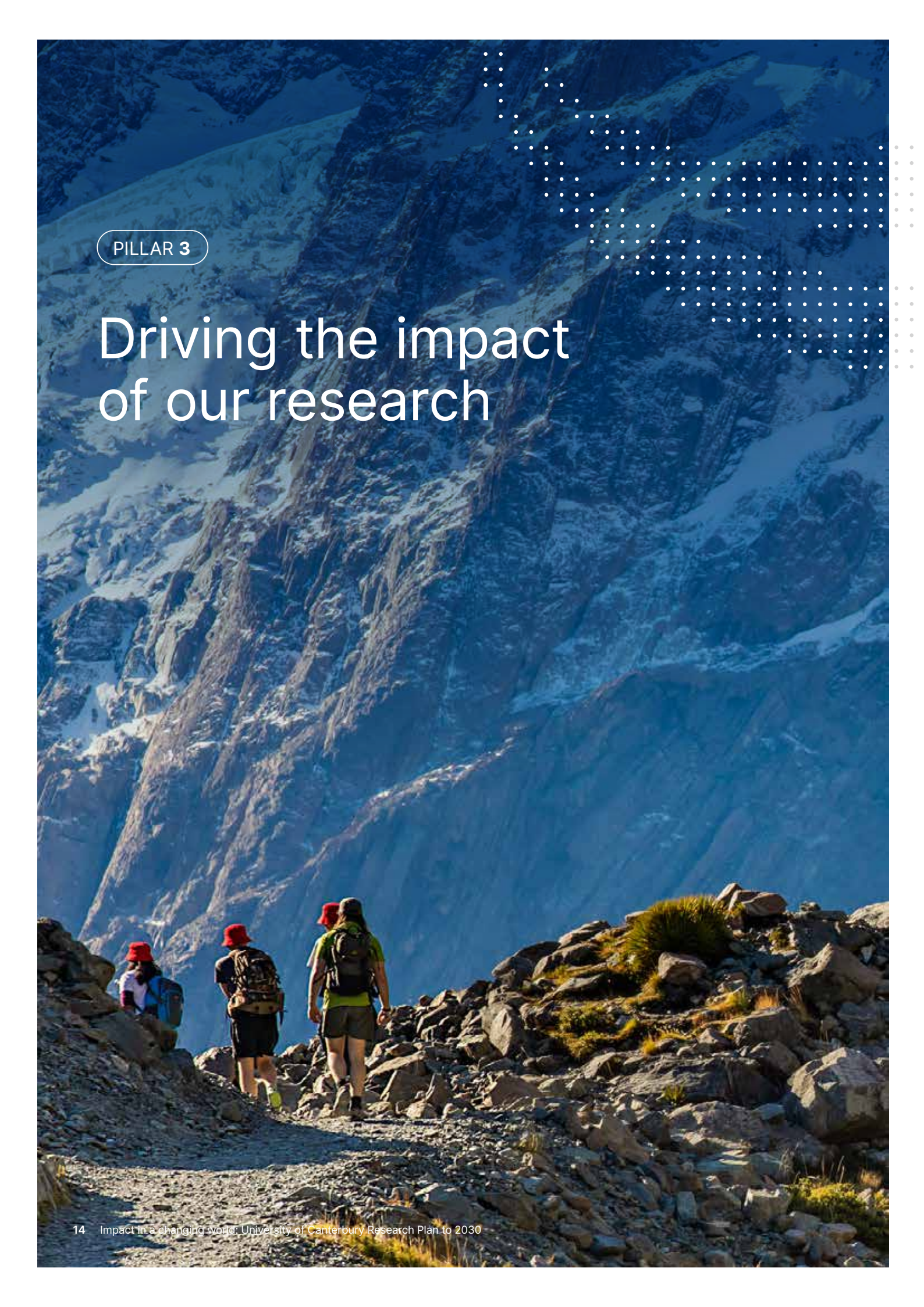
Pillar 2: Positioning UC as a local, national, and global research hub

Align UC's distinctive research identity, strengths, and capabilities

Enhance the visibility and promotion of UC research and its impact

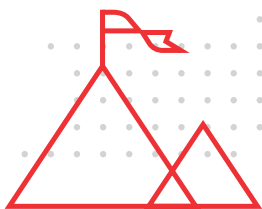
Simplify access to UC Research, expertise, and facilities

Enhance strategic partnerships, collaborations, and research translation pathways



PILLAR 3

Driving the impact of our research



Outcome: Research that informs policy, improves practice, generates innovation, and delivers measurable societal, environmental, cultural, and economic benefit.

UC's commitment to "impact in a changing world" means a focus on outcomes of research beyond academic publication and dissemination.

Pillar 3 seeks to embed impact throughout the research lifecycle by supporting the development, recognition, measurement, communication, and translation of research that delivers meaningful benefits for society, the economy, culture, and the environment.

Academic impact is recognised through established measures such as FWCI, but the University of Canterbury's commitment goes beyond academic impact to consider other aspects such as:

- Influencing policy
- Influencing practice (e.g., in school curriculum, in health practices, in environmental activities)
- Commercialisation of products and services

Impact cannot be easily measured by simple metrics but all impact – academic, social, environmental and economic – can be evidenced. Evidence of the impact of research can then be showcased to grow reputation and recognition of the University and its research which will enhance rankings, attract staff and students, and attract partnerships and engagement opportunities. It will also enhance the status of, and trust in, the University in terms of being a repository of expert knowledge and highlight the service provided by it to our communities.

It is expected that the pathway to impact will be considered as an integral part of the research process, from project design to dissemination of findings. Through the development of the Research Connect Portal and the Researcher Development Programme support will be provided to both researchers and those external to the University to ensure that UC's research is disseminated in a readily accessible way, and the benefit (impact) is realised.

Key Implementation Pathways

Pillar 3: Driving the impact of our research

Support mission-led and impact-focused research

Develop impact measurement and evaluation frameworks to inform best practice

Enhance knowledge exchange, research translation, and implementation pathways

Advance research commercialisation and innovation outcomes





Towards 2030

Together, the three pillars of the Research Plan provide an integrated approach to strengthening the University's research performance, research culture, and research impact. By investing in people and capability, strengthening partnerships and connectivity, and supporting pathways to impact, the University of Canterbury will create an environment in which excellent research can thrive.

The challenges facing Aotearoa New Zealand and the wider world are increasingly complex and interconnected. Addressing these challenges requires research that is collaborative, interdisciplinary, and responsive to the needs of communities, industry, government, and society. Through this Research Plan, the University commits to supporting research that not only advances knowledge but also delivers meaningful benefits beyond academia.

Guided by its Research Identity and strengthened through partnership with Ngāi Tūāhuriri, UC will continue to build on its established

strengths while embracing emerging opportunities. The implementation projects associated with each pillar will provide a practical pathway for achieving the University's research ambitions and enhancing its contribution locally, nationally, and globally.

Success will be measured not only through research performance and reputation, but through the positive difference UC research makes to people, communities, organisations, and the environment. Through this Plan, the University reaffirms its commitment to research excellence, innovation, and impact in a changing world.





**Rangahau
Research**