



2019-2025



Division of Sciences Strategic Plan

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EXCELLENCE IN RESEARCH

AIM

To be a research-led division producing increasingly high-quality and high-impact, fundamental and translational research.

STRATEGIES

1. Use the Divisional Strategic Initiatives Fund to:
 - a. support and grow areas of research strength within the Division. High weight will be given to research that enhances the value of internationally recognised longitudinal studies, or leverages from recognised centres of research strength such as the CoREs.
 - b. support emerging researchers and areas of emerging research strength, by:
 - i. providing a favourable weighting for their applications to the fund
 - ii. providing 'near-miss' funding for Marsden and HRC applications
 - iii. underwriting a component of salary for Marsden and Rutherford Discovery grants obtained by non-tenured staff
 - iv. Providing supplementary funding for equipment
 - c. support research that is in alignment with the Māori Strategic Framework (MSF)
 - d. support Pacific research and develop Pacific research capacity in alignment with the Pacific Strategic Framework
 - e. support interdisciplinary research and cross-divisional collaboration
 - f. support strategic postgraduate research through Divisional PhD strategic Scholarships and Funding.
2. Endeavour to align research efforts with the funding and evaluation guidance provided by government statements on science priorities.
3. Seek research synergies and collaborations across the University, and with national and international groups.
4. Capitalise on Otago's unique and enduring points of difference by supporting research that leverages:
 - a. the unique Otago environment, particularly the natural environment
 - b. the Dunedin Study
 - c. the strength of Health Sciences, and the Division's ability to consider national and international public health issues through collaborative research.

EXCELLENCE IN TEACHING

AIM

To academically challenge and nurture all students in an environment that promotes realisation of potential.

STRATEGIES

1. Academically challenge and nurture all students in a research-informed environment, by:
 - a. sharing and implementing best practices for engaging and motivating high-achieving students
 - b. identifying and assisting students at risk of underachieving
 - c. demonstrating commitment and excellence in teaching by setting an expectation that 100-level courses will include lectures from outstanding researchers
 - d. including a research experience component led by research-active staff in undergraduate programmes.
2. Promote teaching practices that support Māori and Pacific students to succeed at levels comparable with the highest achieving groups within the Division of Sciences, by:
 - a. taking stock of curriculum content and teaching practices and identifying strategies where this process highlights opportunities for enhancement
 - b. developing a Divisional Pacific teaching workshop that promotes cultural responsiveness in teaching practices
 - c. establishing awards for excellence in supporting Māori and Pacific Island students.
3. Ensure high-quality delivery of HSFY courses by making adequate resources available to participating departments.
4. Ensure that programmes are sustainable, distinct and efficiently managed by optimising efficient admission processes for Master of Applied Science programmes (MAppSc).
5. Develop, in collaboration with other Academic Divisions, a Data Science programme that supports a broad range of academic disciplines.
6. Develop graduate attributes and embed them as key teaching and learning outcomes, by:
 - a. formulating discipline-specific attributes
 - b. ensuring graduate attributes are featured in course design and integrated with teaching
 - c. ensuring alignment with the Māori Strategic Framework and the Pacific Strategic Framework.
7. Prioritise strategic support for the application of new and innovative teaching methodologies that enhance and diversify current practices by:
 - a. using the Divisional Strategic Initiatives Fund to support and grow areas of teaching strength within the Division
 - b. ensuring all staff receive appropriate support, time and mentoring to achieve excellence in teaching.

SUSTAINING CAPABILITIES

AIM

To ensure continuing excellence in research and teaching, and ensure that staff feel supported, valued and engaged.

STRATEGIES

1. Provide transparent and strategic financial allocations, by:
 - a. making available to all departments the full financial data in the Divisional RCM model
 - b. setting strategic levels of subvention for each department
 - c. maintaining a Divisional strategic fund with clearly stated aims and application guidelines.
2. Support staff and develop balanced staffing profiles, by:
 - a. monitoring workloads across the Division to ensure equitable and fair treatment of all staff
 - b. taking opportunities to promote diversity, inclusiveness and equity when making new appointments, supporting all University strategic frameworks
 - c. recruiting and retaining Pacific staff
 - d. recruiting and retaining Māori staff
 - e. encouraging staff with leadership potential to attend leadership training courses
 - f. ensuring early succession planning for critical roles
 - g. building sustainable relationships with Pacific communities across New Zealand
 - h. managing the SSR transition period to enable optimal outcomes through the support and professional development of professional staff.
3. Ensure individual programmes and departments are operating efficiently, by:
 - a. developing 5-year plans for departments and programmes that:
 - i. ensure effective use of financial resources
 - ii. provide a pathway to achieving targeted levels of subvention
 - iii. identify infrastructure that is critical to a department's operation
 - b. making use of opportunities to share resources between departments and programmes
 - c. supporting departments that wish to explore the benefits of combining into a School
 - d. introducing business case templates for new academic programme proposals.
4. Facilitate access to appropriate infrastructure by expanding the terms of reference for the Finance and Planning Committee.

EXTERNAL ENGAGEMENT

AIM

To engage proactively with key external bodies to develop productive partnerships and collaborations.

STRATEGIES

1. Strengthen and increase relationships with business and industry, by:
 - a. proactively utilising the expertise and networks of the Research and Enterprise Office and the Development and Alumni Relations Office
 - b. increasing visibility of researchers with skills relevant to business
 - c. encouraging staff participation on commercial governance boards
 - d. rewarding staff for their efforts to engage with commercial entities
 - e. consulting with industry, where appropriate, in designing curricula
 - f. exploring recruitment of PhD students from business and industry.
2. Invest in strategic research collaborations, by:
 - a. building partnerships nationally and internationally that increase competitiveness for large research grants
 - b. supporting participation in the Matariki network
 - c. increase regional contributions as per the Pacific Strategic Framework, in particular Goal 6, Contributing to the Pacific Region and International Progress
 - d. supporting researcher participation in the National Science Challenges.
3. Increase participation in professional bodies, by:
 - a. encouraging staff to take roles in national and international professional boards and committees
 - b. encouraging staff to take policy shaping roles on government panels
 - c. supporting staff to become members of editorial boards of professional journals.
4. Increase connection with research funding bodies, by:
 - a. encouraging an increased number of staff to be involved on selection panels and governing boards of funding bodies
 - b. ensuring staff understand the aims and needs of funding bodies
 - c. actively seeking opportunities to assist in shaping funding body policies.
5. Promote and publicise the Division, by:
 - a. ensuring public awareness of the role and strengths of the Division
 - b. using a range of media to describe and celebrate staff successes.

COMMITMENT AS A LOCAL, NATIONAL AND GLOBAL CITIZEN

AIM

To act in an ethically, socially and environmentally responsible manner and show unwavering commitment to a role that contributes to the regional, national and international good.

STRATEGIES

1. Commit as a local citizen, by:
 - a. continuing the Division's support of outreach in local outreach programmes
 - b. engaging in professional development programmes for local teachers
 - c. encouraging the development of local science/technology industry through the creation of tech-based start-ups, technology transfer, and internship programmes
 - d. engaging with local iwi.
2. Commit as a national citizen, by:
 - a. continuing the Division's support of outreach in national outreach programmes
 - b. supporting the development of the national Science curriculum
 - c. participating in Government bodies to influence policy development
 - d. providing expert input to the design of high school science curricula.
3. Commit as a global citizen, by:
 - a. reflecting the United Nations Sustainable Development Goals in the Division's activities
 - b. participation in international organisations, such as UN agencies and the OECD
 - c. supporting international staff within the Division to maintain links with their home institutions, and encourage academic exchanges
 - d. encouraging undergraduate students to participate in international exchanges
 - e. Incorporating topics relevant to global environmental issues into courses where appropriate
 - f. taking steps to ensure the Division acts in an environmentally responsible manner
 - g. committing to research in the Western Pacific, demonstrating the responsibility that New Zealand has to support the continued development and preservation of the culture of its Pacific neighbours.
4. Proactively contribute to public education and debate on topical or critical science issues.
5. Support student initiatives in outreach and volunteer work.

OUTSTANDING STUDENT EXPERIENCE

AIM

To build on the Otago experience and provide opportunities for students to become well-rounded high achievers.

STRATEGIES

1. Positively engage with students, by:
 - a. creating a learning environment that supports academic achievement and intellectual independence
 - b. encouraging student involvement, curiosity and lifelong learning
 - c. creating more effective communication strategies
 - d. all staff taking responsibility for creating and fostering a supportive learning environment
 - e. encouraging positive engagement of staff and students in extra-curricular science-themed activities
 - f. providing postgraduate students with proactive supervision
 - g. ensuring that postgraduate administrative processes are sustainably transitioned through the SSR period.

2. Promote wellbeing, and encourage students to have a successful, healthy and enjoyable lifestyle while studying at Otago, by:
 - a. encouraging all first-year students to seek course advice
 - b. developing and fostering strong relationships with organisations responsible for student wellbeing
 - c. promoting student engagement with pastoral care and support services at Otago
 - d. recognising pathways for success for Pacific students
 - e. assisting students through the transition from one degree programme to another e.g. HSFY.

3. Communicate the diversity of careers available in the Sciences to students by raising awareness of how students can use their Otago experience after graduation.

OUTSTANDING CAMPUS ENVIRONMENT

AIM

To advocate for equitable access to facilities that are structurally sound and fit for purpose.

STRATEGIES

1. Develop a Division-wide priority plan of space requirements, including:
 - a. identifying non-compliant areas requiring upgrading
 - b. space shortages and excesses.
2. Look to co-locate like disciplines, leading to:
 - a. increased synergies and potential collaborations
 - b. efficiencies with resources.
3. Provide attractive spaces for students and staff.
4. Advocate for a compact Sciences precinct.

DIVERSITY, INCLUSION AND EQUITY

AIM

To have a culture of equity in which we understand, value and advance diversity and equitable outcomes for staff and students.

STRATEGIES

1. Demonstrate commitment to diversity, inclusion and equity through the knowledge, words and work of both staff and students, by:
 - a. requiring student representation and representation of at least one staff member from each department, school and centre on the Division of Sciences Diversity and Equity Network to ensure Division-wide input and effective communication
 - b. incentivising and monitoring staff participation in equity, inclusion and diversity-themed workshops and papers to support ongoing reflection and dialogue about multicultural and inclusive teaching, mentoring and general best practice across the range of divisional activities
 - c. applying University guidelines regarding bilingual messaging, inclusive language and accessibility across media and promotional materials, and encouraging staff to use inclusive language greetings in emails and public engagements
 - d. taking stock of curriculum content and teaching practices, with a focus on diversity, inclusion and multiculturalism, and identifying enhancement strategies where this process highlights best practice
 - e. supporting student recruitment activities that focus on students from underrepresented groups.

2. Associate best practice in equity and diversity with excellence in all employment activities, by ensuring:
 - a. position advertisements use inclusive language and identify cultural competencies as desired candidate attributes
 - b. every recruitment and promotion committee is guided by best practice principles and guidelines that support diversity, inclusion and equity
 - c. every recruitment and promotion committee Chair reviews best practice with support from Human Resources staff
 - d. retention of diverse staff through appropriate mentoring, and provision of safe, supportive, respectful and inclusive working environments.

MĀORI STRATEGIC FRAMEWORK (DIVISION OF SCIENCES)

AIM

To develop teaching practices and departmental cultures that increase the depth and breadth of Māori curriculum, Māori community engagement, and Māori staffing levels.

STRATEGIES

1. Demonstrate commitment to implementation of the Maori Strategic Framework (MSF), by:
 - a. enhancing effective and well-supported Māori Leadership that is knowledgeable, proactive, visible and accessible
 - b. providing appropriate resources and support to the roles and activities of Manutaki Tuarua Māori (Associate Dean Māori), Kaitohutohu Māori, Kaiwhakahaere Māori, Kaiārahi Sciences (Māori student support role and coordinator of Kaiāwhina activities) and Kaiāwhina
 - c. establishing an MSF committee responsible for developing a MSF implementation plan within each department
 - d. providing Divisional support to departments in their development of an implementation plan through clear expectations of outcomes, examples of best practice, and provision with up-to-date educational materials.
2. Support and promote Science Wānanga and Te Ngaru Paewhenua: The Landward Wave Science Scholarships as a mechanism to:
 - a. engage young Māori and their whānau in the benefits of tertiary education and a career in sciences
 - b. provide an opportunity for Divisional staff to engage with Māori and gain a greater understanding of tikanga and te ao Māori
 - c. encourage talented Māori students into postgraduate study and research
 - d. contribute to community partnerships.
3. Create and celebrate a culture of Māori success in meeting the aspirations of the MSF and ensure Māori staff and student Ora (Success and Wellness), by:
 - a. recognising and understanding the holistic view of wellbeing as represented by Te Whare Tapa Wha and te Pae Mahutonga for Māori
 - b. providing culturally-appropriate support to Māori students and staff to ensure success and wellness
 - c. promoting and publicising Māori achievement in research and teaching.



Sciences

Te Rohe a Ahikāroa