Guidelines for Marsden Fund Referees (for Marsden Fund Council Award Proposals)

Funding for research excellence

The Marsden Fund is administered by The Royal Society of New Zealand, PO Box 598, Wellington 6140.

Email: marsden@royalsociety.org.nz, http://royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden

Introduction

The Marsden Fund Te Pūtea Rangahau Marsden invests in investigator-initiated research aimed at generating new knowledge, with long-term benefit to Aotearoa New Zealand. It supports excellent research projects that advance and expand the knowledge base and contributes to the development of people with advanced skills in Aotearoa New Zealand. The research is not subject to the government's socio-economic priorities.

The Marsden Fund encourages Aotearoa New Zealand's leading researchers to explore new ideas that may not be funded through other funding streams and fosters creativity within the research, science and innovation system.

In supporting investigator-initiated research the government is ensuring that Aotearoa New Zealand is contributing to, and benefiting from, the advancement of knowledge globally and is fostering a diversity of research activities of the highest calibre. The Marsden Fund also provides for the long-term and sometimes serendipitous aspects of research, which may lead to profound or unexpected discoveries, or catalyse significant developments in previously unrelated and strategically important fields of knowledge.

Your role as a referee is an integral part of the assessment process. Your detailed comments help in the final assessment of the proposal, and to provide feedback to the applicant. Referees used by the Marsden Fund are anonymous – no identifying information is disclosed to the applicants.

- **Submission of Referee Reports is via a Web-based portal. If you are available to act as a referee, you will later receive a URL which will link to the proposal (available from 1st July onwards) and instructions on how to complete the Referee Report on-line.**

- **Section 1 of the Referee Report goes back to the applicant for comments. Section 2, including grades and the referee's identity, remains confidential to the Marsden Fund Council.**

- **If you consider that you have a minor conflict of interest, describe its nature in Section 2 of the Referee Report Form, after appraising the proposal.**

- **If the conflict of interest is serious, please do not appraise the proposal, and inform the Marsden Fund.**

- **The contents and ideas contained in the proposal are strictly confidential. The proposal material must not be used for any purpose other than assessment of the proposal.**

Referees who have assessed proposals will receive a list detailing the successful programmes in late 2024.

Marsden Fund Council Award

This is the largest of three categories of grants available within the Marsden Fund:

- *Fast-Start:* For emerging researchers, capped at $120,000 per year for up to three years.

- *Standard*: Open to all eligible researchers, amount of funding is flexible and is capped (maximum $320,000 per year for up to three years). These are larger than Fast-Start proposals. Funding can be sought for up to three years.

> - *Marsden Fund Council Award:* Open to all eligible researchers. Approximately 3 times larger than Standard grants, up to $1 million per year for up to 3 years.

The Marsden Fund Council Award was introduced by the Marsden Fund Council in 2018. The expectation is that Marsden Fund Council Awards will enable teams of researchers to come together to engage in collaborative interdisciplinary projects. This will expand the opportunities for interdisciplinary researcher-led projects of the highest ambition and encourage creativity and innovation through greater connections between specialists across disciplines with larger teams.

The assessment criteria for the Marsden Fund Council Award are the same as for all other Marsden proposals (see "Assessment Criteria" below), with an extra criterion:

> ***Proposals must use an interdisciplinary approach to significantly expand research possibilities and ambition through new researcher and institutional links.***

Proposals should clearly demonstrate the potential for significant scholarly impact due to novelty, originality, insight and ambition that characterises Marsden Fund research, plus the potential for fostering new and sustainable linkages between researchers and between institutions beyond the period of the award.

Marsden Fund Council Awards will be particularly suited to projects where the expertise and skills required for the project could not be supported by a Marsden Fund Standard grant. Proposals that require multiple skill sets, incorporate more than one post-doctoral fellow across different research areas, or develop research infrastructure and co-operation across disciplines are encouraged.

Researchers can apply for up to $1 million per year under this category for projects up to 3 years in duration. The Council expects to fund between 1 and 2 grants in this category per year.

Assessment Criteria

The key assessment criteria for the Marsden Fund Council Awards are:

- Proposals must use an interdisciplinary[1] approach to significantly expand research possibilities and ambition through new researcher and institutional links
- Proposals must have the potential for significant scholarly impact[2] because of the proposal's novelty, originality, insight and ambition
- Proposals must be rigorous, and should have a basis in prior research and use a sound research method
- The research team must have the ability and capacity to deliver
- Proposals should develop research skills in Aotearoa New Zealand, particularly those at the post-doctoral level and emerging researchers.

Where relevant to the proposal:

- Proposals must consider the relation of the research to the themes of Vision Mātauranga[3] and, where relevant, how the project will engage with Māori.

1 For more information on **interdisciplinarity**, please refer to Appendix III.

2 **Scholarly impact** is a demonstrable contribution to shifting understanding and advancing methods, theory and application across and within disciplines.

3 For an explanation of **Vision Mātauranga**, please refer to Appendix I.

Assessment Process

Applicants to this grant category submit a full-length proposal (stage 1). After an initial triage process by the Marsden Fund Council, proposals that proceed to the next stage (2) are then sent out for review by up to five referees, selected based on expertise in disciplines relevant to the proposal. Applicants are asked to prepare responses to these Referee Reports, which will then be considered by Council (note that applicant responses to Referee Reports are not seen by the referees themselves). Final funding recommendations are made by Council based on proposals, Referee Reports, and applicants' responses to these reports. The Council expects to fund between 1 and 2 grants in this category each year.

The Role of the Referee

Marsden Fund proposals to this category are assessed by the Marsden Fund Council, made up of researchers from a range of disciplines. Due to the broad nature of its research coverage, the Council will not necessarily be able to provide expert analyses for every proposal. Your comments as a specialist referee are essential for making final recommendations on which proposals should be funded and can also help applicants to refine their proposals for future resubmission.

Preparing a Referee Report involves the following steps:

- Read these guidelines and, in particular, familiarise yourself with the assessment criteria for the relevant Marsden Fund grant category (Standard, Fast-Start or Marsden Fund Council Award).
- Read the proposal and supporting documents carefully and thoroughly.
- Complete your Referee Report by the due date (July 22nd) via the portal. Please contact the Marsden Fund at marsdenref@royalsociety.org.nz if you are unable to meet this deadline for any reason.

In your Referee Report, you will be asked to comment separately on both the *proposal* and the *researcher(s)*, considering the above assessment criteria. The Referee Report consists of two important aspects: your **comments** on both proposal and researchers (Section 1 below), and numeric **grades** for both the proposal and researchers (Section 2 below). Grades given in Section 2 should be consistent with the comments given. Please do not refer to the grades given in your comments, as they are not revealed to the applicants. Note also that your *comments* as a referee are the most important aspect of your review. Gradings without comments, or alongside very limited comments, may be discounted by the assessment panel.

Note that acting as a referee for the Marsden Fund is completely optional, and referees do not receive compensation. If requested, we will provide a letter confirming your participation as a referee. We can also record your contribution to service to your ORCiD record if you wish.

Tone and Bias

Professionalism and respect are core principles of the Royal Society Te Apārangi*, and we encourage referees to follow these principles when providing feedback on proposals or applicants. Comments should be objective and constructive and should not include personal attacks or derogatory language.

We encourage the use of gender-neutral pronouns when talking about applicants and their team members to avoid making unwarranted assumptions about gender identity.

Biases that we are unaware of (unconscious biases) can impact our judgement. Raising our awareness of this kind of bias can help to limit its impact. We recommend that referees watch this short (3 minutes) introduction video on unconscious bias from the Royal Society London to familiarise or reacquaint yourselves with the topic (https://royalsociety.org/topics-policy/publications/2015/unconscious-bias/).

Please also feel free to explore some of the additional resources on this topic below:

- https://sfdora.org/resource/rethinking-research-assessment-unintended-cognitive-and-systems-biases/
- https://implicit.harvard.edu/implicit/takeatest.html
- https://www.microsoft.com/en-us/inclusion-journey/learn
- http://kirwaninstitute.osu.edu/wp-content/uploads/2017/11/2017-SOTS-final-draft-02.pdf
- https://implicit.harvard.edu/implicit/takeatest.html

Note that the assessment panels may assign less weight to Referee Reports that are considered unprofessional in tone.

See the Code of Professional Standards and Ethics developed by the Royal Society Te Apārangi here: https://www.royalsociety.org.nz/who-we-are/our-rules-and-codes/code-of-professional-standards-and-ethics/

Guidance around the use of generative AI technologies in assessment

There is growing concern around the use of generative AI tools (large language models, e.g. Chat GPT) in the writing or assessment of grant proposals, as they could lead to confidentiality breaches and may generate fabricated content and citations.

Referees **must not** use large language models (LLMs) or other generative artificial intelligence (AI) technologies for assessing proposals. This is due to confidentiality concerns. Inputting substantial, detailed information into a generative AI tool forfeits control of where that data may be sent, saved, viewed, or used in the future.

Important Context for Assessment

The proposals have word and space limitations imposed on them (nine pages in total for "Background", "Overall Aim of the Research", "Proposed Research", "Vision Mātauranga*", "Assessment Criteria" and "Specific Methodologies", or eight pages in total if the proposal does not have a Vision Mātauranga component), which may affect the amount of detail they are able to include. Note also that for the 2024 funding round, applicants have been requested to provide a Covid-19 risk mitigation plan in the Roles and Resources section (3I).

Please do not consider the cost of the proposed research. Budgets are not attached and will instead be considered by the Marsden Fund Council. However, Section 4 of the proposal lists the time involvement of researchers. **Note that time involvements are expressed as full-time equivalents, or FTEs; for example, 0.2 FTE per year is equivalent to 1 day per week on the research.**

** For an explanation of **Vision Mātauranga**, please refer to Appendix I.*

Referee's Comments (Section 1)

Referees should address their comments primarily to each of the following, and base their judgment on them:

   I.   **Comments on the proposal.**

  II.   **Comments on the researchers.**

III.   **Comments on how the proposal could be improved.**

I.   Comments on the proposal

The excellence of the proposed research. This should incorporate: interdisciplinarity, through new researcher and institutional links; the potential of the research for significant scholarly impact due to its novelty, originality, insight and ambition; rigour of the proposed research; development of research skills; and, where a referee feels comfortable commenting on Vision Mātauranga, how the proposal has addressed this aspect.

- ***Excellence*** may be determined by consideration of the merit of the proposed research, its design and planning, and how it compares with other Aotearoa New Zealand or international research in the same field.

- ***Interdisciplinarity***: Your assessment should consider whether the proposed research will significantly expand research possibilities and ambition through new researcher and institutional links.

- Your assessment of the ***potential for significant scholarly impact*** of the research should consider whether the work outlined in sections 3A to 3G of the proposal will significantly contribute to advances in theoretical understanding, develop new methodologies, contribute to new knowledge, and / or lead to advancement in a field by cross-fertilisation with ideas and results from another field.

- ***Rigour***: Often the design and planning of a programme of research determines its success. Good design and planning are determined by whether the overall proposal and its specific objectives have a clear focus, and the methods and experimental or sampling design are rigorous and likely to produce high quality results. Specific methodologies are described in section 3E.

- ***Development of research skills:*** The Roles and Resources section of the proposal form (3I) asks applicants to identify the resources and skills available or needed to conduct the research; and the Personnel table in section 4 lists the time contributions of everyone involved in the proposed research. Please comment on these aspects where appropriate.

- You may comment, if you feel comfortable in doing so, on the proposal's **Vision Mātauranga** component. For an explanation of, and more information on, Vision Mātauranga, please see Appendix I. Please note, there is no requirement for referees to comment on this aspect.

For a glossary of commonly used Māori concepts, words and phrases commonly seen in Marsden Fund proposals, please see Appendix II.

There is no prescribed maximum or minimum length for this section, although note that very short (*e.g.* single sentence) answers are of limited use to the panel. For guidance, the average word count varies between 200-450 words.

II.   Comments on the researchers

The ability and capacity of the researchers to carry out the proposed research.

The *track record* of the research team is important in forming your view of whether they will contribute to the advancement of this field. This may depend on how they have performed in the past, and whether they are nationally or internationally recognised, have contributed significantly to understandings in the research area, or have the background and flexibility to make a significant contribution if they are shifting into new areas. The track records need to be assessed relative to the researchers' experience. You may also wish to consider the combined mix of research expertise in the team.

There is no age limit for researchers who apply to the Fund.

There is no prescribed maximum or minimum length for this section. For guidance, the average word count varies between 50-150 words.

III.   How could the proposal be improved?

It is very helpful if referees can include a paragraph on how the proposal could be improved, although this section is optional

There is no prescribed maximum or minimum length for this section. For guidance, the average word count varies between 50-200 words.

Referees' Grades (Section 2; Confidential)

In Section 2 of the report, please provide two numeric grades.

The first grade, "A", is an overall grade for the **proposal**, reflecting interdisciplinarity, the potential of the research for significant scholarly impact, the rigour of the proposed methodology, development of research skills, and Vision Mātauranga if relevant.

Please use the following scale:

Grade 1: Outstanding (almost certain to be funded by any international agency)

Grade 2: Excellent (very likely to be funded by any international agency)

Grade 3: Well above average (worthy of funding)

Grade 4: Average (unlikely to be funded as lacks novelty or just not strong enough)

Grade 5: Below average (would not be funded as contains serious flaws)

The second grade, "B", is a grade for the **researchers** on the proposal and should reflect track record **relative to opportunity**.

Please use the following scale:

Grade 1: Outstanding

Grade 2: Excellent

Grade 3: Well above average

Grade 4: Average

Grade 5: Below average

If you have received any proposals for review from international funding agencies, please benchmark Marsden proposals against these.

Note that the grades will **not** be made available to applicants, which is why this scale is included in "confidential" information in Section 2.

Conflicts of Interest (Section 2; Confidential)

Please indicate any conflicts of interest in Section 2 of the Referee Report. This section is not seen by the applicant.

Conflicts of interest exist where a referee has an interest in the outcome of the funding decision, in particular where approval or rejection of the proposal may benefit or disadvantage the referee. This might occur when a referee: depends on or competes with the applicant professionally; works at, or has recently worked at, the same organisation as the applicant; has recently co-authored research with the applicant; is a co-investigator with any of the applicants on a funded grant; or is currently collaborating with the applicant..

If in doubt about the severity of a conflict of interest, please contact the Royal Society Te Apārangi (marsdenref@royalsociety.org.nz). Major conflicts may preclude you from acting as a referee for a proposal, so should be reported to us as soon as possible.

Additional information on the Marsden Fund is available via this link:

http://royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/

Before Submitting your Report

Before submitting your Referee Report, please ensure that the ***intended grades*** and all comments have been entered.

Reports are due for completion via the portal no later than 22 July 2024 (or as otherwise advised).

Marsden Fund Contact Details (for reference)

Marsden Fund
c/- Royal Society Te Apārangi
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Wellington 6140
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Appendix I: Vision Mātauranga

Vision Mātauranga is a policy about innovation, opportunity and the creation of knowledge that highlights the potential contribution of Māori knowledge, resources and people. Vision Mātauranga is now included as an assessment criterion where relevant to the proposed research.

http://www.mbie.govt.nz/info-services/science-innovation/agencies-policies-budget-initiatives/vision-matauranga-policy

There are four themes:

- Indigenous Innovation, which involves contributing to economic growth through distinctive research and development;

- Taiao, which is concerned with achieving environmental sustainability through iwi and hapū relationships with land and sea;

- Hauora/Oranga, which centres around improving health and social wellbeing;

- Mātauranga, which involves exploring Indigenous knowledge.

Where research projects are of relevance to Māori or involve Māori, the Marsden Fund Council expects that applicants are in consultation with Māori at the planning stage, to achieve the best possible outcomes.

For guidance, the relevance does vary according to panel. Examples of relevance could include proposals that involve biomedical research of significance to Māori health, social research, educational research, entrepreneurship, Indigenous research, natural hazards, native flora and fauna, anthropology, the environment, sporting and cultural activities, literature, and language (even if the approach to these topics is seemingly irrelevant, such as algorithm development, biochemical pathways or mechanical properties).

For background, guidance and resources for applicants can be found here:

https://www.royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/marsden-fund-application-process/submitting-a-proposal/vision-matauranga/

Up to one page is available for statements on Vision Mātauranga in section 3D, immediately following the description of research in sections 3A-3C. This is to enable Vision Mātauranga to be more easily integrated into the conceptual framework and/or research design.

Appendix II: Glossary of te reo Māori terms

Definitions taken from maoridictionary.co.nz

With thanks to Professor Angus Macfarlane, University of Canterbury, for his input.

Aotearoa	the Māori name for New Zealand
Aroha	affection, sympathy, charity, compassion, love, empathy
Atua	ancestor with continuing influence, god, demon, supernatural being, deity, ghost, object of superstitious regard, strange being - although often translated as 'god' and now also used for the Christian God
Hapū	kinship group, clan, tribe, subtribe - section of a large kinship group and the primary political unit in traditional Māori society. It consisted of a number of whānau sharing descent from a common ancestor, usually being named after the ancestor, but sometimes from an important event in the group's history. A number of related hapū usually shared adjacent territories forming a looser tribal federation (iwi)
Hau kāinga	home, true home, local people of a marae, home people
Hauora	Health, wellbeing
Hui	gathering, meeting, assembly
Iwi	extended kinship group, tribe, nation, people, nationality, race - often refers to a large group of people descended from a common ancestor and associated with a distinct territory
Kāinga	home, address, residence, village, settlement, habitation, habitat, dwelling
Kaitiaki	trustee, minder, guard, custodian, guardian, caregiver, keeper, steward
Kaitiakitanga	guardianship, stewardship, trusteeship

Kaumātua	adult, elder, elderly man, elderly woman, senior person - a person of status within the whānau or iwi
Kaupapa	Philosophy, topic, policy, matter for discussion, plan, purpose, scheme, proposal, agenda, subject, programme, theme, issue, initiative
Kaupapa Māori	Māori approach, Māori topic, Māori customary practice, Māori institution, Māori agenda, Māori principles, Māori ideology - a philosophical doctrine, incorporating the knowledge, skills, attitudes and values of Māori society
Koha	gift, present, offering, donation, contribution - especially one maintaining social relationships and has connotations of reciprocity
Kōiwi tangata	Human bones or remains
Kōrero	to tell, say, speak, read, talk, address; speech, narrative, story, news, account, discussion, conversation, discourse, statement, information
Mamae	be painful, sore, hurt
Mana	prestige, authority, control, power, influence, status, spiritual power, charisma - mana is a supernatural force in a person, place or object. Mana goes hand in hand with tapu, one affecting the other. The more prestigious the event, person or object, the more it is surrounded by tapu and mana. Mana is the enduring, indestructible power of the atua and is inherited at birth, the more senior the descent, the greater the mana. The authority of mana and tapu is inherited and delegated through the senior line from the atua as their human agent to act on revealed will. Since authority is a spiritual gift delegated by the atua, man remains the agent, never the source of mana. This divine choice is confirmed by the elders, initiated by the tohunga under traditional consecratory rites (tohi). Mana gives a person the authority to lead, organise and regulate communal expeditions and activities, to make decisions regarding social and political matters. A person or tribe's mana can increase from successful ventures or decrease through the lack of success.
Manaakitanga	hospitality, kindness, generosity, support - the process of showing respect, generosity and care for others
Māori	Māori, Indigenous New Zealander, Indigenous person of Aotearoa/New Zealand - a new use of the word resulting from Pākehā contact in order to distinguish between people of Māori descent and the colonisers
Marae	courtyard - the open area in front of the wharenui (meeting house), where formal greetings and discussions take place. Often also used to include the complex of buildings around the marae
Mātauranga	knowledge, wisdom, understanding, skill - sometimes used in the plural; education - an extension of the original meaning and commonly used in modern Māori with this meaning
Mauri	life principle, life force, vital essence, special nature, a material symbol of a life principle, source of emotions - the essential quality and vitality of a

	being or entity. Also used for a physical object, individual, ecosystem or social group in which this essence is located
Moana	sea, ocean, large lake
Te Moana-nui-a-Kiwa	the Pacific Ocean
Pākehā	English, foreign, European, exotic - introduced from or originating in a foreign country; New Zealander of European descent - probably originally applied to English-speaking Europeans living in Aotearoa/New Zealand
Pepeha	tribal saying, tribal motto, proverb (especially about a tribe), set form of words, formulaic expression, saying of the ancestors, figure of speech, motto, slogan - set sayings known for their economy of words and metaphor and encapsulating many Māori values and human characteristics
Pūrākau	myth, ancient legend, story
Rangatahi	younger generation, youth
Rangatira	chief (male or female), chieftain, chieftainess, master, mistress, boss, supervisor, employer, landlord, owner, proprietor - qualities of a leader is a concern for the integrity and prosperity of the people, the land, the language and other cultural treasures (e.g. oratory and song poetry), and an aggressive and sustained response to outside forces that may threaten these
Rangatiratanga	chieftainship, right to exercise authority, chiefly autonomy, chiefly authority, ownership, leadership of a social group, domain of the rangatira, noble birth, attributes of a chief
Rohe	boundary, district, region, territory, area, border (of land)
Rūnanga	council, tribal council, assembly, board, boardroom, iwi authority - assemblies called to discuss issues of concern to iwi or the community
Tamariki	children - normally used only in the plural
Tāne	husband, male, man
Tangata whenua	local people, hosts, indigenous people - people born of the whenua, i.e. of the placenta and of the land where the people's ancestors have lived and where their placenta are buried
Taonga	treasure, anything prized - applied to anything considered to be of value including socially or culturally valuable objects, resources, phenomenon, ideas and techniques
Tapu	be sacred, prohibited, restricted, set apart, forbidden, under atua protection; restriction, prohibition - a supernatural condition. A person, place or thing is dedicated to an atua and is thus removed from the sphere of the profane and put into the sphere of the sacred. It is untouchable, no longer to be put to common use
Te reo Māori	Māori language

Te Tiriti o Waitangi	The Treaty of Waitangi
Tikanga	correct procedure, custom, habit, lore, method, manner, rule, way, code, meaning, plan, practice, convention, protocol - the customary system of values and practices that have developed over time and are deeply embedded in the social context
Tino rangatiratanga	self-determination, sovereignty, autonomy, self-government, domination, rule, control, power
Tipuna	ancestor, grandparent, grandfather, grandmother - singular form of tīpuna and the eastern dialect variation of tupuna
Tohunga	skilled person, chosen expert, priest, healer - a person chosen by the agent of an atua and the tribe as a leader in a particular field because of signs indicating talent for a particular vocation
Tupuna	ancestor, grandparent – singular form of tūpuna and the western dialect variation of tipuna
Tūrangawaewae	domicile, standing, place where one has the right to stand - place where one has rights of residence and belonging through kinship and whakapapa
Wairua	spirit, soul - spirit of a person which exists beyond death. It is the non-physical spirit, distinct from the body and the mauri
Wahine/wāhine	wahine - woman, female, lady, wife; wāhine - women, females, ladies, wives – plural form of wahine; female, women, feminine
Wairuatanga	spirituality
Wānanga	seminar, conference, forum, educational seminar; tribal knowledge, lore, learning - important traditional cultural, religious, historical, genealogical and philosophical knowledge; tertiary institution that caters for Māori learning needs - established under the Education Act 1990
Whaikōrero	oratory, oration, formal speech-making, address, speech - formal speeches usually made by men during a pōhiri / pōwhiri and other gatherings
Whakapapa	genealogy, genealogical table, lineage, descent - reciting whakapapa was, and is, an important skill and reflected the importance of genealogies in Māori society in terms of leadership, land and fishing rights, kinship and status. It is central to all Māori institutions. There are different terms for the types of whakapapa and the different ways of reciting them including: tāhū (recite a direct line of ancestry through only the senior line); whakamoe (recite a genealogy including males and their spouses); taotahi (recite genealogy in a single line of descent); hikohiko (recite genealogy in a selective way by not following a single line of descent); ure tārewa (male line of descent through the first-born male in each generation)
Whakataukī	proverb, significant saying, formulaic saying, cryptic saying, aphorism. Like whakatauākī and pepeha they are essential ingredients in whaikōrero

Whānau	extended family, family group, a familiar term of address to a number of people - the primary economic unit of traditional Māori society. In the modern context the term is sometimes used to include friends who may not have any kinship ties to other members
Whānaungatanga	relationship, kinship, sense of family connection - a relationship through shared experiences and working together which provides people with a sense of belonging. It develops as a result of kinship rights and obligations, which also serve to strengthen each member of the kin group. It also extends to others to whom one develops a close familial, friendship or reciprocal relationship
Whenua	land - often used in the plural; territory, domain; country, land, nation, state

Appendix III: Interdisciplinarity

Meeting the "interdisciplinary research" criterion is **essential** for Council Award proposals to succeed. It is important to note that this is more than bringing together two or more disciplines in an additive approach. Simply larger Standard proposals where various modules are added together but not integrated well are not likely to succeed. Ideally, the proposed research would integrate several disciplines together and be more than the sum of its parts (interactive).

The Marsden Fund Council is keen to fund interdisciplinary proposals that in the long term, may lead to transdisciplinary research, but this is not a requirement.

Examples

Projects funded so far in this category:

https://www.royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/awarded-grants/marsden-fund-highlights/2019-marsden-fund-highlights/exploring-temperature-dependence-earths-biosphere-over-time-and-space/

https://www.royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/awarded-grants/marsden-fund-highlights/2019-marsden-fund-highlights/study-into-whether-ancient-malaria-led-to-genetic-predisposition-to-diabetes-gout-in-pacific-populations/

https://www.royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/awarded-grants/marsden-fund-highlights/2020-marsden-fund-highlights/in-the-green-could-local-plant-diversity-be-the-key-to-understanding-childhood-allergies-and-asthma/

https://www.royalsociety.org.nz/what-we-do/funds-and-opportunities/marsden/awarded-grants/marsden-fund-highlights/2021-marsden-fund-highlights/deciphering-gravitational-waves-and-decoding-signals-from-the-universe/

Definitions of different types of research

Multidisciplinarity:

Draws on knowledge from different disciplines but stays within their boundaries (*additive*)

Interdisciplinarity:

Analyses, synthesises and harmonises links between disciplines into a coordinated and coherent whole (interactive).

Any study or group of studies undertaken by scholars from two or more distinct scientific disciplines. The research is based upon a conceptual model that links or integrates theoretical frameworks from those disciplines, uses study design and methodology that is not limited to any one field, and requires the use of perspectives and skills of the involved disciplines throughout multiple phases of the research process.

Transdisciplinarity:

Integrates diverse disciplines, and transcends their traditional boundaries (*holistic*). There are several frameworks that can be used here. For example, it can be defined as research efforts conducted by investigators from different disciplines working jointly to create new conceptual, theoretical, methodological, and translational innovations that integrate and move beyond discipline-specific approaches to address a common problem.

References:

- [Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness - PubMed (nih.gov)](#)
- https://www.hsph.harvard.edu/trec/about-us/definitions/
- For a useful visual guide to different types of collaborative research, please see https://makinggood.design/thoughts/tasty (Jo Bailey)