



Ngā Puanga Pūtaiao Fellowship

2023 Guidelines for Panellists

Contents

Background	2
Objective	3
Scheme operation	3
Eligibility	4
Applicant Eligibility.....	4
Definition of STEM	5
Host Eligibility.....	6
Additional eligibility criteria.....	6
Selection process	6
Considerations for assessing proposals to each criteria.....	7
Role of the Panel.....	7
Panel Review Process.....	7
Assessment in relation to applicants' years of research experience.....	8
Consideration of referee reports	8
Unconscious bias.....	9
Sensitive issues	10
Privacy	10
Conflicts of interest.....	10
Final decision.....	11
Timetable for Panellists	11
Contact us	11
Appendix I: Vision Mātauranga.....	12
Appendix II: Glossary of te reo Māori terms.....	16
Appendix III: DORA.....	21

Background

The [Te Ara Paerangi - Future Pathways White Paper](#) describes the desired future of our research, science and innovation system. It is a research system that:

- Embeds Te Tiriti o Waitangi;
- Helps to improve the wealth and resilience of Māori and Pacific Peoples communities by being more responsive to Māori and Pacific Peoples;
- Grows workforce representation through dedicated fellowship schemes for Māori, Pacific Peoples and women.

This describes a vibrant research ecosystem that attracts and supports talent from all communities of Aotearoa New Zealand, and a system that creates new futures and career pathways for all.

The current research system needs to strengthen its ability to attract and retain Māori and Pacific talent, particularly in the Science, Technology, Engineering and Mathematics (STEM) fields. Building our talent in these areas is key to ensure that Aotearoa's research system has the capacity, diversity and talent it needs to deliver its communities, including Māori and Pacific communities.

To help enable this future, the Government is funding a new short-term Fellowships opportunity, the Ngā Puanga Pūtaiao Fellowships. These Fellowships will help to build and strengthen a diverse STEM research workforce by investing in talented early- and mid-career Māori and Pacific researchers.

Ngā Puanga Pūtaiao refers to the early- and mid-career stage of scientific (Pūtaiao) researchers, when researchers are blooming and demonstrating their talent and potential (Puanga). At the same time, this career stage can be fragile and precarious. The Ngā Puanga Pūtaiao Fellowships will support researchers to be successful and progress to develop the new seeds for the next generation of STEM researchers.

Ngā Puanga Pūtaiao are to be administered by the Royal Society Te Apārangi on behalf of the Ministry of Business, Innovation and Employment (MBIE).

He whakamārama

Ko tā [Te Ara Paerangi](#) he whakamārama i te āpōpō e wawatatia ana mō tō tātou pūnaha rangahau, pūtaiao me te auaha. He pūnaha rangahau:

- e tāmau ana i Te Tiriti o Waitangi
- e āwhina ana ki te whakapiki i te whairawa me te manawaroatanga o ngā hapori Māori me ngā iwi o Te Moana-nui-a-Kiwa mā te urupare nui ake ki te Māori me ngā iwi o Te Moana-nui-a-Kiwa.
- e whakatipu ana i te whakakanohitanga o te rāngai kaimahi mā ngā kaupapa whakawhiwhinga motuhake mā te Māori me ngā iwi o Te Moana-nui-a-Kiwa, tae atu ki te wahine.

E whakamārama ana tēnei i tētahi pūnaha hauropi rangahau ngangahau e whakamanea ana me te tautoko i ngā pūkenga mai i ngā hapori katoa o Aotearoa, me tētahi pūnaha ka hanga anamata hou, me ngā huarahi aramahi mā te katoa.

Me whakapakari tēnei pūnaha rangahau i te āheinga ki te whakamanea me te pupuri i ngā pūkenga Māori me ngā iwi o Te Moana-nui-a-Kiwa, inakoa i roto i ngā mahi Pūtaiao, Hangarau, Pūhanga me te Pāngarau (STEM). Mā te whakapiki i te hunga whai pūkenga i roto i ēnei mahi e whakarite i te

raukaha o te pūnaha rangahau o Aotearoa, me te kanorau, me ngā pūkenga hoki hei painga mō ōna hāpori, arā tae atu ki te Māori me ngā hāpori o Te Moana-nui-a-Kiwa.

Hei āwhina ki te whakamana i tēnei anamata, e tuku pūtea ana te Kāwanatanga ki tētahi arawātea Pūkengatanga hou, wā-poto hoki a Ngā Puanga Pūtaiao. Mā ēnei Pūkengatanga e āwhina ki te whakapiki me te whakapakari i tētahi rāngai kaimahi rangahau STEM kanorau, mā te haumi ki ngā kairangahau whai pūkenga Māori me Te Moana-nui-a-Kiwa, otirā he kairangahau aramahi-tōmua, aramahi-wawaenga hoki.

E tohu ana a Ngā Puanga Pūtaiao ki ngā wā aramahi-tōmua, aramahi-wawaenga hoki o ngā kairangahau pūtaiao, i te wā e puāwai mai ana ngā kairangahau, otirā e whakaatu ana i ō rātou pūkenga me te puanga. I taua wā hoki, he makuhane, he mōrearea hoki tēnei wā o te aramahi. Ka tautoko ngā Pūkengatanga o Ngā Puanga Pūtaiao i ngā kairangahau kia angitu ai, kia koke whakamua ai hoki ki te whakawhanake i ngā kākano hou mō ngā whakareanga hou o ngā kairangahau STEM.

Ka whakahaeretia a Ngā Puanga Pūtaiao e Te Apārangi, mō Te Manatū.

Objective

The objective of the Fellowship is to invest in Māori and Pacific Peoples to establish careers in Science, Technology, Engineering and Mathematics (STEM) research and to grow the network of Māori and Pacific Peoples in the research, science and innovation (RSI) system. The Fellowship will facilitate Māori and Pacific Peoples who are future leaders in STEM research to enter into or progress through the RSI workforce, building a career foundation that enables them to flourish.

Te Whāinga

Ko te whāinga o te Pūkengatanga, he haumi ake ki Ngā Tāngata Māori me Te Moana-nui-a-Kiwa ki te whakarite aramahi i roto i te rangahau Pūtaiao, te Hangarau, te Pūhanga me te Pāngarau (STEM) me te whakatipu i te whatunga o Ngā Tāngata Māori me Te Moana-nui-a-Kiwa i roto i te pūnaha rangahau, pūtaiao me te auaha (RSI). Mā te Pūkengatanga e whakarite i te urunga, te kokenga rānei o ngā kaiārahi anamata o Ngā Tāngata Māori me Te Moana-nui-a-Kiwa ki roto i te rangahau STEM ki te rāngai mahi RSI, te hanga aramahi taketake hoki e tōnui ai rātou.

Scheme operation

Whakahaere o te kaupapa

A total of \$19.3 million has been allocated for the Ngā Puanga Pūtaiao Fellowships. Royal Society Te Apārangi must maximise the use of the funding to ensure, as best as possible, \$14.8 million is attributed to Māori researchers and \$4.5 million is attributed to Pacific researchers for the Fellowships that are awarded during the term.

Fellowships are awarded on 0.8 Full Time Equivalent (FTE) basis, unless otherwise agreed by Royal Society Te Apārangi.

Two types of Fellowship will be awarded, early-career Fellowships (0-6 years post-PhD research experience) and mid-career Fellowships (7-15 years post-PhD research experience), with both Fellowship types having a four-year term. Fellowships will be awarded with an early:mid-career

stage ratio of 2:1 where practicable. It is intended the scheme operation will invest in at least 20 Fellows.

Available support for Fellowships is indicated below:

	Early-career Fellowship	Mid-career Fellowship
Description	0-6 years research experience (post-PhD)	7-15 years research experience (post-PhD)
Contribution to researcher's salary (per annum)	\$80,000	\$110,000
Contribution to Host organisation overheads (per annum)	\$80,000	\$110,000
Research related expenses (per annum)	\$40,000	\$60,000
Total (per annum)	\$200,000	\$280,000
Duration (years)	4	4
Total award	\$800,000	\$1,120,000

Table: Available support for the Ngā Puanga Pūtaiao Fellowships

Royal Society Te Apārangi will work in partnership with Kanapu and develop supporting activities for Fellows to facilitate connection and knowledge sharing within the cohort. Activities could include an annual hui for Fellows to attend and present their findings and demonstrate the impact of their research. These workshops could provide multi-disciplinary and multi-organisational links across the research, science and innovation sector.

Kanapu is a programme designed by Māori, for Māori to ignite Māori talent and leadership across te ao Māori in research, science and innovation spaces; on marae, within hapū and iwi mahi, and throughout our hapori in the cities.

Eligibility

Māraurautanga

Applicant Eligibility

To be eligible, applicants must:

- Be either Aotearoa New Zealand citizens, or permanent residents, unless otherwise agreed by Royal Society Te Apārangi;
- Whakapapa Māori, declare as identifying as Pacific ethnicity¹, or both;
- Have a PhD conferred on or after 01 January 2008, or have completed all requirements for their degree to be conferred at the time of application. The eligibility period for PhD conferral may be extended under any of the following scenarios at the discretion of Royal Society Te Apārangi:
 - Extended sickness leave;
 - Part-time employment or career interruptions as a result of care giving responsibilities;
 - To account for work or service in the community or an industry;
 - As otherwise agreed by Royal Society Te Apārangi.

¹ MBIE have deemed, for the purposes of this Fellowship, Pacific ethnicity is intended to take into consideration the complex configurations and multiple ethnic identities of Pacific Peoples and cultures. It is intended to be inclusive of people who affirm their identity as indigenous Pacific Peoples and those of Fijian Indian descent.

- Propose a research project under the Fellowship that relates to a STEM subject. The field(s) of clinical medical research are ineligible (e.g., practising medical, dental, psychological or nurse graduates).
- Commence their programme of research within six months of the award notification, unless otherwise agreed by Royal Society Te Apārangi;
- Be supported by an Aotearoa New Zealand-based research organisation, with a supporting declaration that affirms that:
 - The applicant satisfies the eligibility criteria;
 - The applicant has good potential to develop and progress their career in STEM research.
 - The applicant is not permanently employed in a research position or employed on a fixed-term basis for a period that exceeds the Fellowship term, and the host will employ the applicant for the duration of the Fellowship.
 - The host will facilitate the provision of support and facilities that will enable the applicant to succeed in their Fellowship for the duration of the Fellowship.

Definition of STEM

Māori and Pacific communities have voiced the importance they place on STEM research and that they want to grow the number of Māori and Pacific people working in STEM fields. The Ngā Puanga Pūtaiao Fellowships respond to this by aiming to strengthen the ability of the RSI system to attract and retain Māori and Pacific talent in STEM fields. For the purpose of Ngā Puanga Pūtaiao Fellowships, STEM is defined to fall within one or more of the [Australian and New Zealand Standard Research Classification Fields of Research](#) (excluding clinical sciences):

- 30 Agricultural, veterinary and food sciences
- 31 Biological sciences
- 32 Biomedical and clinical sciences (excluding clinical sciences)
- 34 Chemical sciences
- 37 Earth sciences
- 40 Engineering
- 41 Environmental sciences
- 42 Health sciences
- The following groups of 45 Indigenous studies:
 - 4509 Ngā mātauranga taiao o te Māori (Māori environmental knowledges)
 - 4510 Te hauora me te oranga o te Māori (Māori health and wellbeing)
 - 4512 Ngā pūtaiao Māori (Māori sciences)
 - 4515 Pacific Peoples environmental knowledges
 - 4516 Pacific Peoples health and wellbeing
 - 4517 Pacific Peoples sciences
- 46 Information and computing sciences
- 49 Mathematical sciences
- 51 Physical sciences
- 52 Psychology (excluding clinical and health psychology)

We recognise that STEM exists within Mātauranga Māori and other indigenous knowledge systems, and these systems offer valuable perspectives toward STEM research. These knowledge systems are also broad and complex, encompassing much more than just the STEM fields that are the focus of the Ngā Puanga Pūtaiao Fellowships. In addition, there are likely to be subcategories of FOR codes not listed above which could be considered to fall within STEM e.g. 380302 Mathematical

economics or other indigenous research categories. During the suitability assessment the panel may exclude projects they do not consider sufficiently STEM focussed, in alignment with the Ngā Puianga Pūtaiao Fellowship Terms of Reference. To aid them in this decision ensure that you describe your STEM research in the “How have you contributed to the generation, revitalisation, preservation, and dissemination of knowledge?” section in the Narrative CV template.

At least 50% of the proposed research should fall under one or more of the aforementioned ANZSRC codes. The other 50% or less of the project can include other ANZSRC codes to facilitate inclusivity of multidisciplinary projects.

Host Eligibility

The host must be an Aotearoa New Zealand-based research organisation which can demonstrate it is capable and willing to provide support and facilities that will enable the applicant to succeed in their Fellowship.

- Eligible hosts are research organisations that meet the following definition: 'An organisation that has sufficient internal capability for carrying out research, science or technology, or related activities.'

Additional eligibility criteria

In accordance with [Russia Sanctions Act 2022](#) and in alignment with the [Endeavour Fund 2023 Investment Round Gazette notice](#), the applicant and their research must not benefit a Russian state institution (including but not limited to support for Russian military or security activity) or an organisation outside government that may be perceived as contributing to Russian war efforts.

Selection process

Ngā paearu

The selection process will comprise an eligibility screening, a suitability assessment of all eligible applicants by the panel and a stratified selection ballot to determine which applicants will be awarded the Ngā Puanga Pūtaiao Fellowship.

Eligibility screening

Applications will be checked against the eligibility criteria set out above and for completeness. All eligible applications will be forwarded to the Selection Panel for consideration.

Panel Suitability Assessment

The Panel will consider all eligible applications to ensure they are consistent with the background and objectives of the Ngā Puanga Pūtaiao Fellowship Terms of Reference. All applications that meet this condition will enter the stratified selection ballot. When considering whether an application will enter the ballot, the panel will consider the following:

- Does the application demonstrate a potential (relative to opportunity) for the applicant to establish, re-enter, or progress their career in STEM?
- Does the application demonstrate capability of the Host to support the Fellow (including cultural support and commitment to embedding Te Tiriti o Waitangi) throughout the Fellowship?
- Does the application articulate a reasonable research plan with high likelihood to deliver research outcomes?

The Panel will reach a consensus on which applications meet these criteria and will go on to be included in the stratified selection ballot.

Stratified ballot for selection

A stratified ballot will be used to select recipients. The Māori researcher ballot will be drawn first, until the funding allocation is exhausted, and ensuring an early-mid-career stage ratio of 2:1 where practicable. Unselected Māori applicants who also identify as Pacific Peoples will be added to the Pacific researcher ballot. The Pacific Peoples researcher ballot will be drawn next, until the funding allocation is exhausted, and ensuring an early-mid-career stage ratio of 2:1 where practicable.

Considerations for assessing proposals to each criteria

Ngā mea hei whakaaroaro mō te aromatawai i ngā tono ki ia paearu

Role of the Panel

The role of the panel is to review all eligible proposals to ensure they demonstrate the suitability criteria and are consistent with the background and objectives of the Ngā Puanga Pūtaiao Fellowship Terms of Reference.

All applications that the panel deem to meet these criteria will be entered into the stratified selection ballot to select the fellowship recipients.

Panel Review Process

Prior to the Panel meeting, panellist will be provided with the following information:

- Total application statistics including demography and career (early- or mid-) stage.
- An electronic document containing all eligible applications.
- A scoresheet to register recommendations.

Panellists are asked to consider the following questions for each application in order to ensure all candidates going through to the stratified selection ballot fulfil the Fellowship objectives.

The application must demonstrate that:	Relevant application section(s)	Questions to consider (relative to years of research experience)
Applicant track record and potential to establish, re-enter or progress their career in STEM research relative to opportunity.	Narrative CV and Referee Reports	Does the applicant demonstrate: <ul style="list-style-type: none"> • sufficient track record in STEM? • sufficient potential in STEM? • Is the majority of the proposed research in a STEM field?
Suitability of the host's capability to support the Fellow (including cultural support and commitment to embedding Te Tiriti o Waitangi) throughout the Fellowship.	Host support	Does the host demonstrate they have the capability to provide: <ul style="list-style-type: none"> • Research support? • Career support? • Cultural support?
The clear articulation of a reasonable research plan with high likelihood to deliver research outcomes.	Proposed Research	Is the research plan <ul style="list-style-type: none"> • Clearly articulated? • Reasonable? • Highly likely to deliver research outcomes?

Each criterion should be considered and assigned as either “Yes” meets the criteria or “No” there are reservations (three votes per proposal). All proposals will be sorted on the number of “Yes” votes they received with each of the 3 criteria given equal weighting. All “Yes” votes will automatically go through to the stratified selection ballot. The panel will have the opportunity to discuss any proposal that receives one or more “No” votes. Following discussion the panel will reach a consensus as to which proposals should go on to enter the stratified ballot.

Assessment in relation to applicants’ years of research experience

Panel members must consider applications in relation to an applicant’s opportunities. To support his process, applicants are asked to provide their ‘years of research experience’ after PhD conferment, which is stated on the first page of the application. The years of research experience excludes periods of maternity/parental leave, medical leave or other relevant career breaks outlined in Narrative CV of the application. Applicants are furthermore required to state period of career breaks in the CV. The years of an applicant’s stated research experience additionally decides if an applicant is eligible for the early- or mid-career fellowship.

Consideration of referee reports

Applications must be supported by two applicant-solicited referees reports. At least one of these should be able to comment on the applicant’s capability and/or potential as a STEM researcher. Where relevant, applicants may choose to have one referee comment on other aspects important for their career as a STEM researcher, e.g. working with communities, stakeholder relationships, demonstration of leadership, research service or any other aspects you see relevant. Referees are asked to comment on the applicant’s abilities, relative to opportunity, in a series of questions on various aspects of a STEM research career as well as to provide any other comments they feel relevant. Referees are encouraged to engage with all the questions where relevant. However, if a referee feels uncomfortable answering, or are unable to answer, any of these questions, they may choose to solely provide comments in the free text field. Ultimately, it is the responsibility of the applicant to ensure that their chosen referees combined are able to comment on the applicant’s research plan and the applicant’s ability to progress their STEM research career.

Note that applicant’s with less than three years of research experience should use their PhD supervisor as one of their referees unless otherwise agree to by Royal Society Te Apārangi. Potential conflicts of interests as a consequence of this rule should be noted without negatively affecting the assessment. The panel must note other instances where a referee has a conflict of interest in recommending an applicant. The panel must use their combined disciplinary and cultural understanding to inform their decisions about a potentially conflicted referee.

Referee reports have been provided to you in confidence. The applicant has solicited the referee reports, which were directly submitted to Royal Society Te Apārangi. The applicants do not see the reports.

Unconscious bias

Unconscious bias refers to a bias which we are unaware of, and which happens outside of our control. Royal Society Te Apārangi wants to ensure that this bias has minimal influence on funding recommendations being made by Society-appointed reviewers. The literature suggests that awareness of unconscious bias can limit the impact of this bias. We therefore encourage reviewers to watch the short (3 minutes) introduction video below from the Royal Society London to familiarise/reacquaint yourself with the topic.

[Royal Society London – Understanding unconscious bias](#)

Some recommendations to blunt the impact of unconscious bias are to:

- Be prepared to recognise the impact of unconscious bias;
- Deliberately slow down decision making;
- Reconsider reasons for decisions;
- Question cultural stereotype.

The [Declaration on Research Assessment \(DORA\)](#) recognises the need to improve the ways in which researchers and the outputs of scholarly research are evaluated. Therefore we encourage reviewer to read the Rethinking Research Assessment - Unintended Cognitive and System Biases resource which is amended to these guidelines in Appendix III.

Please also feel free explore some of the additional resources below:

- <https://implicit.harvard.edu/implicit/takeatest.html>

Link to Harvard University implicit association tests (IAT) on unconscious bias in relation to Gender and Science, and Gender and Career.

- <https://www.mslearning.microsoft.com/course/72169/launch>

Short Microsoft eLesson course designed to help participants understand what unconscious bias is, how it works, and strategies to counter it in the workplace.

- <http://kirwaninstitute.osu.edu/wp-content/uploads/2017/11/2017-SOTS-final-draft-02.pdf>

“State of the Science: Implicit Bias Review” from Ohio State University’s Kirwan Institute for the Study of Race and Ethnicity – this publication covers a wide range of issues relating to implicit or unconscious bias and general mitigation strategies.

- <https://implicit.harvard.edu/implicit/takeatest.html>

Unconscious bias training prepared by the Tertiary Education Commission in 2018 for the Performance-Based Research Fund (PBRF) assessment panels.

Sensitive issues

Privacy

Royal Society Te Apārangī has obligations under the Privacy Act to keep confidential certain information provided by individuals. Moreover, the records of deliberations by panels are regarded as strictly confidential; as are the contents of applications.

- Panel members should ensure the safe keeping of all applications and related confidential documents (e.g. applications and referee reports).
- At the conclusion of the assessment process, members should leave documentation with Royal Society Te Apārangī staff and destroy any documentation remaining elsewhere.
- Panel members should not enter into correspondence or discussion of the contents of the applications with referees, third parties, or the applicants. Any necessary correspondence shall be addressed by the Secretariat of the Ngā Puanga Pūtaiao Fellowship.
- The intellectual property of the ideas and hypotheses put forward in the applications should be treated in strict confidence.

Conflicts of interest

Royal Society Te Apārangī takes the issue of conflicts of interest very seriously. A rigorous position is taken in order to maintain the credibility of the allocation process and to ensure that applications are subjected to fair and reasonable appraisal.

Royal Society Te Apārangī wants to ensure that the panel members are active researchers with an excellent background in research. As these researchers will invariably have connections with some applicants, conflicts of interest will arise. Where these occur for panel members, the following rules will apply.

- All conflicts of interest must be declared in writing to Royal Society Te Apārangī. Society staff will minute all conflicts of interest and actions taken.
- Where a panel member is a family member or close friend of any applicant(s), that person will not assess the proposal and take no part in the consideration of that proposal. They will hear about the outcome of that proposal when official letters are sent to all applicants.
- If a panel member has an interest in an application, such as collaborating with an applicant or an applicant's group, or is conflicted with the applicant* then that member shall not assess the proposal or interview the candidate.
- A panel member cannot be a referee for any applicant in the current funding round.
- If both Co-Chairs have a conflict of interest then the duties of chairing the interview shall be passed to another panel member.

**A panel member is generally deemed to be conflicted if:*

- *They work in the same department as the applicant(s). Where the department is large and contact between the panel member and applicant(s) is minimal, the Chair may deem there to be no conflict.*
- *They work at the same CRI AND are in the same team as the applicant(s) (the level of conflict will depend on the size of the organisation).*
- *They work at the same company as the applicant(s). The level of conflict will depend on the size of the company.*
- *They have co-authored publications with the applicant(s) in the last 5 years*
- *They have a low level of comfort assessing the application due to their relationship with the applicant(s).*

When all conflicts of interest are taken into account, the Panel Chair may decide that the remaining panellists' expertise is not sufficient for assessment of a particular proposal. In this case, an additional opinion from an external independent person may be sought. Alternatively, a panellist who has previously left the room may be asked to return to answer technical questions only.

Final decision

The Panel will recommend applicants for inclusion in the selection ballot, from which recipients will be selected (see Section Process above). Please note that MBIE is the final decision maker and will consider the recommended proposals to ensure they have the potential to deliver benefit to New Zealand. As a result of this, MBIE may:

1. Seek additional information.
2. Set pre-contractual conditions that must be met before contracting occurs.
3. Add additional terms and conditions to the contract.
4. Decide not to fund the applicant.

Timetable for Panellists

Wātaka

Date	Activity
Tuesday 05 September, 2023	Proposals On-Line Web-based application portal opens.
Tuesday 31 October, 2023	Application deadline. On-Line portal closes at 2 pm (NZST).
December, 2023	Results announced.
1 January, 2024	Earliest contract start date.
30 June, 2024	Latest contract start date (unless otherwise agreed to by Royal Society Te Apārangi).

Contact us

Whakapā mai

For any enquiries, please first seek clarification from your research office.

Please address enquiries by email to: puanga@royalsociety.org.nz or phone: + 64 4 470 5764

Appendix I: Vision Mātauranga

Āpitihanga 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.

The four themes are:

- **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; and
- **Mātauranga**, which involves exploring indigenous knowledge.

How do I decide whether Vision Mātauranga applies to my proposed research?

The five ways of conceptualising Vision Mātauranga in your research (see below) may help you decide if this applies to your project. The categories have been adapted from those on the National Science Challenge, Biological Heritage website <https://bioheritage.nz/about-us/vision-matauranga/> hosted by Manaaki Whenua Landcare Research. Please note, however, that these categories are fluid. There may well be overlap between them in terms of the nature and degree of relevance to Māori, and not every point in each category need apply. The original categories were set out by MBIE in information for the Endeavour Fund c. 2015.

Ways of conceptualising Vision Mātauranga in your research

- Research with no specific Māori component
 - No mātauranga Māori (Māori knowledge) is used.
 - Māori are not associated with the research process (e.g. not on any research management / advisory / governance panels, it is not inclusive of Māori land or institutions, nor the subject of any component of the research).
 - Work is not likely to be of greater direct relevance to Māori than members of any other group.
- Research specifically relevant to Māori
 - There is specific relevance to Māori.
 - Mātauranga Māori may be used in a minor way to guide the work and its relevance to Māori.
 - It includes work that contributes to Māori aspirations and outcomes.
- Research involving Māori
 - Mātauranga Māori may be incorporated in the project, but is not central to the project.
 - Research is specifically and directly relevant to Māori and Māori are involved in the design and/or undertaking of the research.
 - The work typically contributes to Māori (e.g., iwi / hapū, organisations) aspirations and outcomes.
- Māori-centred research
 - The project is Māori led, and where Mātauranga Māori is used alongside other knowledges (e.g. through frameworks, models, methods, tools, etc.).
 - Kaupapa Māori research is a key focus of the project.
 - Research is typically collaborative or consultative, with direct input from Māori stakeholders.

- There is alignment with and contribution to Māori (e.g., iwi / hapū, organisations) aspirations.
- Kaupapa Māori research
 - Mātauranga Māori is incorporated, used and understood, as a central focus of project and its findings.
 - Research is grounded in te ao Māori and connected to Māori philosophies and principles.
 - Research typically uses kaupapa Māori research methodologies.
 - Te reo Māori may be a central feature to this kaupapa or research activity, and the applicant has medium to high cultural fluency or knowledge of tikanga and reo.
 - The research is generally led by a Māori researcher; non-Indigenous researchers may carry out research under the guidance/mentoring of a Māori researcher.
 - Māori participation (iwi/hapū/marae/individual) is high.
 - The work contributes strongly to Māori (e.g., iwi/hapū, organisations) aspirations and outcomes and is mana enhancing.

Developing a Vision Mātauranga statement

The Vision Mātauranga statement can be integrated into your proposed research or provided as a separate statement.

It is important to keep in mind that there is no single approach or prescription for Vision Mātauranga: one size does not fit all and there are many possible ways of addressing Vision Mātauranga. Vision Mātauranga should not, however, be seen as an add-on, nor should it be treated as separate from the research, methods or people involved in the project. A holistic approach that considers reciprocity and relationships is therefore desirable. It is also essential that any costs associated with Vision Mātauranga capability development and engagement are accounted for in the budget (section 7).

Vision Mātauranga does not begin and end with your Vision Mātauranga statement. You should document how you have considered Vision Mātauranga and demonstrate applicable actions and relationships throughout the research. The following questions may be useful to consider when conceptualising and writing your project:

- Have you co-created the research topic/issue with an iwi or Māori organisation?
- What does working in partnership with iwi mean to you as a researcher?
- To what extent have you discussed the research with Māori stakeholders and agreed on the methodology you will use?
- Was there full disclosure and informed consent to the proposed research with Māori stakeholders? How has that agreement/informed consent been agreed to?
- Has the budget been disclosed and agreed to with Māori partners? Is there provision in that budget for Māori involvement, capability development and consultation?
- What provisions have you made to ensure there is appropriate technology transfer to Māori stakeholders as the research proceeds and as findings become available towards the end of the project?
- Are there benefits to Māori? What are they? And how have these been agreed with Māori partners?
- How is the project an opportunity to build the capacity of Māori researchers or students in your discipline?
- How will you share the research outcomes with Māori?
- Has there been agreement about the intellectual property ownership of research findings with Māori partners? What is the nature of that agreement?

- Is there a need for members of the research team to be proficient in te reo Māori? How has this aspect been addressed?
- Is there a Tiriti o Waitangi component or requirement in your research?
- Is the research mana enhancing?

Vision Mātauranga resources

Below you will find a non-exhaustive list of published resources that describe, discuss, and talk about how researchers have engaged with Vision Mātauranga and kaupapa Māori research. These range from early conceptions of Vision Mātauranga to more recent frameworks. The resources underscore the diverse ways Vision Mātauranga may be approached across disciplines and methodologies.

For a glossary provided to panellists and referees of commonly used Māori concepts, words and phrases commonly seen in Ngā Puanga Pūtaiao Fellowship proposals, please see Appendix II: Glossary of te reo Māori terms.

Allen, W., Jamie M. Ataria, J. M., Apgar, J. M., Harmsworth, G., and Tremblay, L. A. (2009). Kia pono te mahi putaiao—doing science in the right spirit. *Journal of the Royal Society of New Zealand*, 39:4, 239-242. DOI: [10.1080/03014220909510588](https://doi.org/10.1080/03014220909510588)

Crawford, S. (2009). Mātauranga Maori and western science: The importance of hypotheses, predictions and protocols, *Journal of the Royal Society of New Zealand*, 39:4, 163-166. DOI: [10.1080/03014220909510571](https://doi.org/10.1080/03014220909510571)

Broughton, D. (Te Aitanga-a-Hauiti, Taranaki, Ngāti Porou, Ngāpuhi), and McBreen, K. (Waitaha, Kāti Māmoe, Ngāi Tahu). (2015). Mātauranga Māori, tino rangatiratanga and the future of New Zealand science. *Journal of the Royal Society of New Zealand*, 45:2, 83-88. DOI: [10.1080/03036758.2015.1011171](https://doi.org/10.1080/03036758.2015.1011171)

Kana, F. and Tamatea, K. (2006). Sharing, listening, learning and developing understandings of Kaupapa Māori research by engaging with two Māori communities involved in education. *Waikato Journal of Education*, 12, 9-20. <https://researchcommons.waikato.ac.nz/bitstream/handle/10289/6198/Kana%20Sharing.pdf?sequence=3&isAllowed=y>

Macfarlane, S., Macfarlane, A. and Gillon, G. (2015) Sharing the food baskets of knowledge: Creating space for a blending of streams. In A. Macfarlane, S. Macfarlane, M. Webber, (eds.), *Sociocultural realities: Exploring new horizons*. Christchurch: Canterbury University Press, 52-67.

Moewaka Barnes, H. (2006). Transforming Science: How our Structures Limit Innovation. *Social Policy Journal of New Zealand Te Puna Whakaaro*, 29, 1-16. <https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/journals-and-magazines/social-policy-journal/spj29/29-pages-1-16.pdf>

Pihama, L., Tiakiwai, S.-J., and Southey, K. (eds.). (2015). *Kaupapa rangahau: A reader. A collection of readings from the Kaupapa Rangahau workshops series*. (2nd ed.). Hamilton, New Zealand: Te Kotahi Research Institute. https://researchcommons.waikato.ac.nz/bitstream/handle/10289/11738/Kaupapa%20Rangahau%20-%20A%20Reader_2nd%20Edition.pdf?sequence=7&isAllowed=y

Smith, L. T., Maxwell, T. K., Puke, H., and Temara, P. (2016). Indigenous knowledge, methodology and mayhem: What is the role of methodology in producing indigenous insights? A discussion from Mātauranga Māori. *Knowledge Cultures*, 4(3), 131–156.

<https://addletonacademicpublishers.com/component/content/article?id=2834:feature-article-indigenous-knowledge-methodology-and-mayhem-what-is-the-role-of-methodology-in-producing-indigenous-insights-a-discussion-from-matauranga-maori>

Appendix II: Glossary of te reo Māori terms

Āpitihanga II: Papakupu o ngā kupu reo Māori

Definitions taken from maoridictionary.co.nz

Ka mihi ki a Ahorangi Angus Macfarlane, Te Whare Wānanga o Waitaha, mō tēnei. 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 wharehau (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 pohiri 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: DORA

Āpitihanga III: DORA