

2023

Postdoctoral Fellowship application guidelines

NGĀ ARATOHU MĀ NGĀ KAITONO

Changes for 2023

Ngā rerekētanga mō te tau 2023

- Total value of the Fellowship has been increased to \$400,000. Per annum, the 2-year Fellowship will award \$80,000 towards the researcher's salary, \$80,000 in organisational overheads and 40,000 for research-related expenses.
- Budget must be submitted as part of the application.
- Eligibility amendments:
 - The applicant must not be permanently employed in a research position.
 - Eligibility may also be extended to take into account any career interruptions experienced due to being the [primary caregiver](#) for young children born in (or close to) an applicant's eligibility period (0-4 years post-PhD conferment date). If the applicant is the primary caregiver of a dependent child, the applicant is able to extend the period of eligibility by two years per child.
- As a condition of contract, research outputs fully or partially arising from Rutherford Foundation funding must meet the MBIE Open Research Policy.

Background

He whakamārama

The Royal Society Te Apārangi-Rutherford Foundation (the Foundation) was established as a Charitable Trust in 2008 with the aim of building human capability in science and technology by providing support for excellent New Zealand early career researchers. The Foundation offered scholarships and fellowships, which carried the hallmark of excellence enabling strong connections to New Zealand to be maintained, thereby increasing the benefits to New Zealand that accrue from the investment in these recipients. The Trust was wound up in 2018 when the management of the Foundation's funding opportunities was transferred to Royal Society Te Apārangi (the Society). The funding opportunities are supported by Government funding.

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Objective

Ngā whāinga

The objectives of the Rutherford Foundation Fellowships and Scholarships are to support the education and development of promising excellent early career researchers with the potential to excel in a research environment.

The funding opportunities support early career researchers who demonstrate a passion for research, science and technology, and have a strong sense of the purpose and benefits of research to New Zealand.

Receipt of a Rutherford Foundation award is expected to have a significant value in the future career development of the supported Scholars and Fellows and help them to establish a foundation on which to embark on an independent research career.

About the Fellowship

Mō te Fellowship

The Rutherford Foundation Postdoctoral Fellowship is a 2-year fellowship awarded on a full-time basis (1 FTE), unless otherwise agreed to by the Society. The total value of the Fellowship is \$400,000 (excluding GST) of which:

- \$80,000 per annum contributes to the Fellow's salary
- \$80,000 per annum contributes to organisational overheads
- \$40,000 per annum for research-related expenses

Up to 5 Fellowships can be awarded in the 2023 funding round.

Eligibility criteria

Ngā paearu āheitanga

The Rutherford Foundation Postdoctoral Fellowship are open to early-career researchers. For the purpose of the Rutherford Foundation Postdoctoral Fellowship, early-career researchers are researchers whose doctoral degrees were conferred no more than four years prior to the year in which the fellowship is awarded.

- For the 2023 funding round, applicant's PhD must have been conferred on or after 01 January 2019.
 - An exemption to this clause can be sought to allow applicants to demonstrate that their PhD has been submitted before the application closing date and can be examined by the date of the short-listing.
 - A further exemption can be sought to demonstrate a reasonable absence from a research career, for instance to take parental leave or for extended sickness leave.
 - Eligibility may also be extended to take into account any career interruptions due to being the [primary caregiver](#) for young children born in (or close to) an applicant's eligibility period (0-4 years post-PhD conferment date). If the applicant is the primary caregiver of a dependent child, the applicant is able to extend the period of eligibility

by two years per child. The extension of two years per dependent child is inclusive of any periods of parental leave. There is no maximum identified.

- Applicants must not be permanently employed in a research position.
- Applicants must be supported by a New Zealand-based research institution that can provide the appropriate support and facilities to enable the applicant to succeed in their Fellowship for the full two years of the Fellowship's term.
- Applicants from all fields or research, science and technology, including social sciences and the humanities, are eligible to apply.
- Applicants must be either New Zealand citizens, or have continuously resided in New Zealand for at least two years immediately prior to their application AND hold, or be deemed to hold, a New Zealand resident visa (please refer to Immigration New Zealand for information on who is deemed to hold a New Zealand resident visa).

Selection criteria

Paearu whiriwhiri

The award criteria must ensure successful proposals are consistent with the background and objectives of the Fellowships stated above. The criteria for assessing applications are:

- demonstration of academic excellence
- potential for career development
- quality of the proposed research programme
- depth of understanding of the proposed research, its ultimate purpose, and benefits to New Zealand
- additional criterion that may be considered: transfer of skills.

Additional rules

Ngā ture tāpiri

- Successful applicants must commence their programme of research within 12 months of the award notification unless otherwise agreed to by the Society.
- If the applicant is not already an employee of the host institution, the host must agree to employ the applicant for the duration of the fellowship.

Selection process

Paearu aromatawai

The Society will appoint a selection panel, chaired by the President of Royal Society Te Apārangi, or their nominee, to oversee the selection process. The assessment of proposals is a two-stage process.

- Stage one is a short-listing for an interview by the Selection Panel.
- Stage two is the interviewing of short-listed applicants by the Selection Panel.

Depending on the number of submitted applications, the Panel Chair may choose to:

- invite additional panel members to help with the assessment, and/or
- reduce the number of panellists assessing each application (minimum of three per proposal).

Applicants invited to interview will have their flight expenses covered by the Society. Applicants that are unable to travel to the interview may request to have the interview conducted by videoconference.

All applicants will be notified in late September as to whether they have been invited to interview. Successful applicants will be notified in November (TBC).

Application closing date

Wā kati o ngā tono

Applications and supporting information must be submitted to Royal Society Te Apārangi on the Rutherford Foundation Proposals on-line portal by the closing date of **03 August 2023 at 5 pm** (NZST).

Application process

Tukanga tono

Proposals must be submitted on the web-based portal, Proposals On-Line.

- Researchers must contact their host institution's research office coordinator to obtain their login details for the Proposals On-Line system.
- Researchers should write their proposals directly into Proposals On-Line using the forms and templates provided with the original formatting retained. The templates can be downloaded directly from Proposals On-line.
- Please note that paper copies (including declarations) are not required when submitting a proposal through the Proposals On-Line portal. Proposals On-Line has a document printing facility which can be used to view and print the application for checking and your own records.
- The layout of the entire application on Proposals On-Line is automatic. The limit on space in all sections of the templates should be adhered to and the typeface should be 11 point, Times or similar type font, single spacing (11 point), with margins of 2 cm on the left and 2 cm on the right sides of the page. Instructions in italic may be removed, but not the margins. No additional pages or attachments will be accepted other than where requested or required.

Assistance with filling out the on-line application form

Ngā aratohu mō te whakakā i te puka tono

The on-line application consists of information entered directly into the portal in combination with the upload of specific templates and documents as listed in the table below.

Section	Information	Type of entry
Sections 1-3	Applicant details, eligibility and fields of research	Entered on-line
Sections 4a-d	CV - Qualification(s), previous employment history, publications, awards and other notable contributions	Download the "Qualifications and career history" template. Upload completed form when finished
Section 5	Vision Mātauranga themes	Entered on-line
Section 6	Project Title and Summary	Entered on-line
Section 7-12	Background, proposed research, references, Vision Mātauranga, potential for career development, and timetable	Download the "Research" template. Upload completed form when finished
Section 13	Referees	Entered on-line
Supporting information	<ul style="list-style-type: none"> • Proof of citizenship or residency • Academic transcript(s) including undergraduate and PhD studies • A declaration form signed by you, your supervisor, and a duly authorised agent at the host organisation • Budget 	<ul style="list-style-type: none"> • Upload copy • Upload copy (1 file for all transcripts) • Download declaration template and upload when signed • Download budget template and upload when completed

Table 1: Application contents

1 Applicant's details

This section is for personal details. It identifies who you are and where you can be contacted most readily. Complete this section, providing all details. If any of your contact details should change at any stage after the application is submitted, please inform the Society as soon as possible.

ORCID

There is a facility in this section of the portal for applicants to add or create an ORCID ID (<https://orcid.org/>). An ORCID ID is preferred from all applicants, but is not mandatory. Please click on the "Create or Connect your ORCID ID" button on the top right of the "Contact Details" section and follow instructions.

2 Eligibility and host information

Date PhD conferred (dd/mm/yyyy)

Enter the date that your PhD was conferred. You also need to scan and upload a copy of your academic transcript showing when your doctoral degree was conferred (see Supporting Information). The Society reserve the right to request original or certified copies of the documents, for example, prior to announcing short-listed applicants.

Research experience

Please provide the number of years of research experience you have attained after conferment of your doctoral degree. This should be a whole number between zero to four years and exclude any agreed career interruptions for parental leave, extended sickness leave, or other research breaks. This will aid panellists in assessing your proposal, under the selection criteria, relative to the opportunity you have had. Note that periods of part-time work can be factored in by multiplying the length of time with the FTE component for the period, for example, 1 year working at 0.5 FTE counts for half a year of research experience etc. Any applicants who have had career interruptions (due to parental leave, illness, longer periods of part time work, etc.) should additionally list these interruptions under section 4b, “Current and previous employment history and career interruptions”. The information included here will further aid panellists in assessing your research relative to opportunity. The Society reserves the right to request further documentation supporting your stated years of research experience.

Citizenship

Please select from the drop down menu whether you are a New Zealand Citizen or hold/are deemed to hold a New Zealand resident visa. If you hold, or are deemed to hold, a New Zealand resident visa, you need to indicate how long you have resided in New Zealand immediately prior to this application. Proof of citizenship or residency must be scanned and uploaded to Proposal On-line (see supporting information). Original or certified copies of the documents may be requested by the Rutherford Foundation Secretariat.

Proposed host institution, department and supervisor/mentor

Please enter the name, department and email address of your proposed supervisor/mentor.

Eligibility exemption (if applicable)

Please enter the reasons for why you are asking for a PhD exemption (for example, thesis submitted but not yet conferred, parental leave or extended sickness leave). Note that this requires prior approval from the Society.

3 Field of research

Fields of research (FOR) classification

The FOR classification allows research and development (R&D) activity to be categorised according to the field of research. In this respect, it is the methodology used in the R&D that is being considered. Please enter up to FIVE codes from the list of research codes supplied in “Fields of Research Classification Codes” here. For a list of codes, please refer to the Field of Research Calculator at:

<https://royalsociety.org.nz/what-we-do/research-practice/field-of-research-calculator/>

Please use codes that are as specific as possible, in other words, 6 digits. Also indicate project key words or phrases not exceeding 255 characters in total (separated by commas or semi-colons; please do not use the return key).

As part of the Society's [New Zealand Research Information System](#) (NZRIS) obligations, we are required to report the share of each FOR code to the proposed research. Please indicate the % share of each FOR code to the proposed research. The shares should add up to 100%.

Socio-economic objective (SEO) classification

The [Australian and New Zealand Standard Research Classification](#) (ANZSRC) and SEO classification allow R&D activity in Australia and New Zealand to be categorised according to the intended purpose or outcome of the research rather than the processes or techniques used in order to achieve this objective. The purpose categories include processes, products, health, education and other social and environmental aspects in Australia and New Zealand that R&D activity aims to improve. Please enter up to FIVE codes from the drop-down field, using codes that are as specific as possible. For a list of codes, please refer to the Socio-Economic Objectives Calculator at:

<https://royalsociety.org.nz/what-we-do/research-practice/socio-economic-objectives-calculator/>

As part of the Society's NZRIS obligations, we are required to report the share of each SEO code to the proposed research. Please indicate the % share of each SEO code to the proposed research. The shares should add up to 100%.

Project category

Please select one of the following categories that best fits the theme of the proposed project: Life Sciences (LFS), Physical Sciences and Mathematics (PEM), or Humanities and Social Sciences (HSS). This information will be used to track the proportion of short-listed and funded proposals in each category and help to ensure equal opportunities across different fields of research. Please use the following information as a guide:

Humanities and the Social Sciences (HSS)

Research related to the human condition or aspects of human society.

This includes, but not limited to: English; languages; history; religion; philosophy; law; classics; linguistics; literature; cultural studies; media studies; art history; film; economics; education; psychology (cognitive, social, developmental, organisational, community and health); cognitive science; linguistics; archaeology; anthropology; sociology; social, cultural and human geography; social anthropology; architecture, urban design and environmental studies; public health; nursing; public policy; marketing; political science; and business studies.

Life Sciences (LFS)

Research related to understanding the activities that occur in cells and tissues and the interrelationships between organisms and their environment.

This includes, but not limited to: physiology (plant or animal), pathology (animal or plant), pharmacology, molecular biology, genetics, cell biology, microbiology; neurobiology and neuropsychology (including animals as a model species for humans); animal behaviour; population biology genetics; functional genomics and related bioinformatics; biostatistics and modelling; animal, plant and microbial ecology; biogeography; biodiversity; phylogenetics; systematics and evolution; biophysics, chemical biology; and biochemistry.

Physical Sciences, Engineering and Mathematics (PEM)

Research related to the physical world and mathematics.

This includes, but not limited to: physics; physical chemistry; organic chemistry; analytical chemistry; inorganic chemistry; pure and applied mathematics; statistics; logic, theoretical and engineering aspects of computer and information sciences; complexity theory; operations research; nanotechnology; software and hardware engineering; applications and robotics; materials science; engineering (including bioengineering and other cross-disciplinary research activities); geology; geophysics; physical geography; oceanography; hydrology; meteorology; atmospheric science; earth sciences; astronomy; and astrophysics.

Type of research activity

Collection of research activity data for Rutherford Foundation Postdoctoral Fellowship proposals is part of our reporting obligations for NZRIS. The default setting on the portal for each proposal is “Basic” and set to 100%. This can be changed if required. If no change is required, no action is needed.

The four activities are:

- **Pure basic research** (Default setting for Rutherford Foundation Postdoctoral Fellowship): is experimental and theoretical work undertaken to acquire new knowledge without looking for long term benefits other than the advancement of knowledge.
- **Strategic basic research:** is experimental and theoretical work undertaken to acquire new knowledge directed into specified broad areas in the expectation of practical discoveries. It provides the broad base of knowledge necessary for the solution of recognised practical problems.
- **Applied research:** is original work undertaken primarily to acquire new knowledge with a specific application in view. It is undertaken either to determine possible uses for the findings of basic research or to determine new ways of achieving some specific and predetermined objectives.
- **Experimental development:** is systematic work, using existing knowledge gained from research or practical experience, which is directed to producing new materials, products, devices, policies, behaviours or outlooks; to installing new processes, systems and services; or to improving substantially those already produced or installed.

4 CV (qualifications and career history template)

4a. Qualifications (Degrees/Diplomas completed)

Please enter the date the qualification was granted, the type of qualification, and the institution from which it was granted. You can add additional rows if needed.

4b. Current and previous employment history and career interruptions (if applicable)

Please include current and previous positions you've held. In addition to positions held, please also add periods of career interruptions (for example, maternity leave, periods of part time work, caring for family, etc.) if applicable. This information will further aid panellists in assessing your application relative to opportunity.

4c. Awards

Please enter the type of award and the year you received the award.

4d. Peer reviewed publications and other notable contributions

Please list published peer-reviewed publications (for example, journal articles, book chapters, books edited, etc.), and other notable contributions that demonstrate your capabilities as a researcher (for example, awarded research or travel grants, patents, conference chairs, speaker invitations, editorial boards, conference committees, community work etc.).

5 Vision Mātauranga themes

[Vision Mātauranga](#) is a policy about innovation, opportunity and the creation of knowledge that highlights the potential contribution of Māori knowledge, resources and people.

Applicants should identify which, if any, of the four Vision Mātauranga themes below are associated with the proposed research. If this is not applicable to your proposed research, you must tick N/A and provide a rationale for why this is (use the box provided in the online portal).

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

Collection of the % contribution of each Vision Mātauranga theme to the proposed research are part of our reporting obligations for NZRIS. If you have ticked one or more Vision Mātauranga themes, please consider each theme one at a time. Indicate the proportion of the proposed research that aligns with that theme. Note that it is possible for the combined total to be over 100% (for example, if the proposed research is entirely Mātauranga and also has a Hauora/Oranga theme, the contributions could be 100% and 10% respectively).

Please note that the percentages do not form part of the assessment criteria – they were introduced as part of our NZRIS obligations.

If one or more themes apply to your proposed research programme, up to one additional page will be available for the research section (Section 7-10) of the application. This gives applicants an opportunity to more easily integrate Vision Mātauranga into the conceptual framework and/or research design of the proposed programme, for example, demonstration of consultation, linkages, outcomes or other relevant information. Alternatively, applicants may choose to gather all relevant Vision Mātauranga information under a separate heading (Section 9), or use any combination of information across sections 7-10. Where Vision Mātauranga is appropriate to a proposal, it can contribute to the assessment of its overall excellence.

How do I decide whether to include a Vision Mātauranga statement in my proposal?

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 as in categories b and c 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 the Ministry for Business, Innovation and Employment in information for the Endeavour Fund c. 2015.

Ways of conceptualising Vision Mātauranga in your research

a. Research with no specific Māori component

- No mātauranga Māori (Māori knowledge) is used.
- Māori are not associated with the research process (for example, 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.

b. 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.

c. 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 (for example, iwi, hapū, organisations) aspirations and outcomes.

d. Māori-centred research

- The project is Māori led, and where Mātauranga Māori is used alongside other knowledges (for example, 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 (for example, iwi, hapū, organisations) aspirations.

e. 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 (for example, iwi, hapū, organisations) aspirations and outcomes and is mana enhancing.

Developing a Vision Mātauranga 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.

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? 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 Rutherford Discovery Fellowship proposals, please see Appendix I – 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
- 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
- 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
- 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.
- 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.
- 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>

6 Project title and summary

6a. Title of proposed research

Please provide a title that describes the nature of your proposed programme of research. Keep the title brief and to the point.

6b. Project summary

Using a maximum of 300 words, please provide a summary of the planned project suitable for a lay audience with some limited science knowledge. It may be used for reporting and public information.

Notes for sections 7-10

- If no Vision Mātauranga theme is identified in Section 5, the TOTAL page limit for sections 7-10 is THREE pages, with no set limit for each section within this. You may delete section 9 - Vision Mātauranga from the template.
- If one or more Vision Mātauranga theme is identified in Section 5, the TOTAL page limit for sections 7-10 is FOUR pages, with no set limit for each section within this.

NOTE that the additional space of up to one page provided for proposals aligned with a Vision Mātauranga theme, is solely for providing additional information related to Vision Mātauranga. Applications that fill this space with information that is not relevant to Vision Mātauranga will be assessed less favourably than applications that fulfil the intent of the extra space.

It is up to the applicant to decide on how much space to allocate to each of the sections 7-10. Applicants may chose to integrate Vision Mātauranga under Sections 7-8 and leave Section 9

empty, gather all relevant Vision Mātauranga information under Section 9, or any combination of both. Do not change the margins.

7 Background information including benefits to New Zealand

7a. Background information

Please give the context for the proposal by summarising, in plain English, the state of the knowledge in the field and any research you may have already undertaken in this area.

7b. Benefits to New Zealand

Please explain the benefits of this research to New Zealand.

8 Proposed research

Please describe the proposed research and specific objectives of the proposed research. Include, where appropriate, the hypotheses being tested, the methodology that will be used, sampling design, methods of data analysis and major milestones.

9 Vision Mātauranga

As noted above, applicants may integrate Vision Mātauranga into the conceptual framework and/or research design of the proposed programme, e.g. demonstration of consultation, linkages, outcomes or other relevant information. Alternatively, applicants may choose to gather all relevant Vision Mātauranga information under a separate heading (Section 9) or use any combination of information across sections 7-9. If N/A was selected in Section 5, please delete Section 9.

10 References

Please list bibliographical or other references, including full titles, used in any of the above sections.

11 Potential for career development

Please outline, in half a page or less, why you want to do this project in the context of how you intend to develop your future research career. For example, a change of research group and 'mentor' can be beneficial to your career development. If your previous host and/or mentor is the same as what you have proposed for this Fellowship, please clearly state why this is most beneficial to your future research career. You could also discuss the potential for new transfer of skills from this Fellowship opportunity.

12 Timetable

In half a page or less, please describe in general terms the anticipated course of the research programme, including timelines for the milestones described in section 8, and 10 (if applicable). It is acknowledged that this timetable may change as the research progresses.

13 Referees

Please enter the names and contact details of three referees who have agreed to provide a reference for you. You are expected to include a supervisor of your Doctoral programme (unless otherwise approved by the Society). If you have already undertaken Postdoctoral

research, the supervisor of this research should comprise the second referee (unless otherwise approved by the Society).

When you have entered the referee names, and ensured that they are willing to provide the Rutherford Foundation with a reference for you before the application closing date of 03 August 2023, you need to select “SEND EMAIL”. Upon selecting “SEND EMAIL”, an automatic email will be sent to your referee with a URL access link to a web portal where the referee can upload the reference.

It is prudent for you to check that the referees have received the invitation to review your application and the URL link. Occasionally, the email that is automatically generated when selecting “SEND EMAIL” is inadvertently identified as spam and ends up in a referees ‘junk’ folder in their email client. In this case, you can ask your referee to contact us by email.

Note that as the invite for referee reports are sent out before the application closing date, the Society is unable to attach a copy of your project description to the referee invite. We will therefore ask the referee to contact you should they wish to see more information on your proposed research.

If a referee informs you that he or she for some reason can't upload a referee report before the deadline, you can enter an additional referee on the On-line Proposals web portal. In the instance where the society receives more than three referee reports, we will use the first three reports received.

You can check if the Society has received each of the applicant-solicited referee reports by logging in to the proposals on-line system and go to the Referees section.

Please remember that it is your responsibility to ensure that your referees upload their report to the portal no later than the closing date for applications, in other words, **03 August 2023 at 5 pm (NZST)**.

Supporting information

Ētahi atu kōrero

In addition to the completed electronic application, applicants must upload electronic copies of the following documents (scanned jpeg or PDF preferred):

- A declaration form signed by you, your supervisor, and a duly authorised agent at the host organisation confirming that the proposed host institution and supervisor support the application.
- Proof of New Zealand citizenship or residency.
- Academic transcript(s) including undergraduate and PhD studies.
- Rutherford Foundation Postdoctoral Fellowship budget

The Society may request to see original or certified copies of the above documents where relevant.

Budget

You must provide us with a budget for how you propose to use the \$40,000 per annum of research related expenses. This may include research expenses, equipment depreciation/rental and Sub-contractors (if applicable).

Research expenses

This category should include the general operating expenses associated with the research proposal such as consumables, travel (for conferences, collaboration etc.), costs associated with Vision Mātauranga, capital purchases under \$5,000, and other miscellaneous costs associated with research. This does not mean that equipment, such as a spectrometer, can be divided into separate components all less than \$5,000 each.

Equipment depreciation/rental

The Rutherford Foundation Postdoctoral Fellowship scheme does not fund the purchase of equipment directly but may allow for an annual depreciation or rental cost. In the case of rental costs, the share of the total cost of the equipment should be proportional to the use of the equipment as outlined in the proposal. Note that many institutions make a general provision for depreciation in their overhead costs. If this is the case, depreciation costs cannot be included under direct costs.

Statistics

Ngā mōhiohio tauranga

The Society encourages applications from all eligible members of the New Zealand research community. To monitor the profile of different groups of applicants and identify funding trends and gaps, the Society would appreciate applicants providing the information requested in this section of Proposals On-Line. The statistical data will be used by Royal Society Te Apārangi for statistical purposes only. Note that this information will not form part of your application (with the exception of the year your PhD was conferred as entered under section 2 of the application).

Submitting your application

Tuku tono

Once you are happy with your application, you must mark it as COMPLETED. To do this, select Preview/Print from the left hand menu, followed by “Mark as Completed”. This flags to your institution coordinator that the proposal has been completed and can be released to the Society. If you need to make changes to your application after you have marked it as completed, you must confer with your research office first.

MBIE Open Research Policy

Royal Society Te Apārangi, as an administrator of Government research funding, has adopted the MBIE Open Research Policy. A condition of contract for successful proposals with therefore be that research outputs fully or partially arising from Rutherford Discovery Fellowship funding must comply with the MBIE Open Research Policy on Open.

Contact us

Whakapā mai

Further enquiries should be made by contacting the Rutherford Foundation Secretariat by email:

Rutherford.Foundation@royalsociety.org.nz

Appendix I: Glossary of te reo Māori terms

Āpitianga I: 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 whareniui (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 (for example, 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