#132

COMPLETE

Collector:	Web Link 1 (Web Link)
Started:	Tuesday, March 08, 2022 1:28:33 PM
Last Modified:	Wednesday, March 16, 2022 4:00:01 PM
Time Spent:	Over a week

Page 2: Section 1: submitter contact information

Q1

Name

Victoria Smith

Q2

Email address

Privacy - 9(2)(a)

Q3 **Yes**

Can MBIE publish your name and contact information with your submission?Confidentiality notice: Responding “no” to this question does not guarantee that we will not release the name and contact information your provided, if any, as we may be required to do so by law. It does mean that we will contact you if we are considering releasing submitter contact information that you have asked that we keep in confidence, and we will take your request for confidentiality into account when making a decision on whether to release it.

Q4 **Yes**

Can MBIE contact you in relation to your submission?

Page 3: Section 2: Submitter information

Q5 **Individual**

Are you submitting as an individual or on behalf of an organisation?

Page 4: Section 2: Submitter information - individual

Q6 **No**

Are you a researcher or scientist?

Q7

Age

Privacy - 9(2)(a)

Q8

Gender

Q9

In which region do you primarily work?

Q10

Ethnicity

Page 5: Section 2: Submitter information - individual

Q11

What is your iwi affiliation?

Respondent skipped this question

Page 6: Section 2: Submitter information - individual

Q12

If you wish, please specify to which Pacific ethnicity you identify

Respondent skipped this question

Page 7: Section 2: Submitter information - individual

Q13

What type of organisation do you work for?

University

Q14

Is it a Māori-led organisation?

No

Q15

Which disciplines are most relevant to your work?

Physical sciences

Q16

What best describes the use of Mātauranga Māori (Māori knowledge) in your work?

There is some Mātauranga Māori, but it is not the main science knowledge

Page 8: Section 2: Submitter information - organisation

Q17 **Respondent skipped this question**

Organisation name

Q18 **Respondent skipped this question**

Organisation type

Q19 **Respondent skipped this question**

Is it a Māori-led organisation?

Q20 **Respondent skipped this question**

Where is the headquarters of the organisation?

Q21 **Respondent skipped this question**

What best describes the use of Mātauranga Māori (Māori knowledge) in your organisation?

Page 9: Section 3: Research Priorities

Q22

Priorities design: What principles could be used to determine the scope and focus of research Priorities?(See page 27 of the Green Paper for additional information related to this question)

I agree that national priorities should form part of the research funding system, particularly given investments are made from public money. However, we should also reflect international goals and trends within these priorities to ensure we are effective on the global stage and enhance collaboration.

The impacts of deprioritisation should be considered, including how we retain the capacity and skills of research staff who may begin their careers under distinct priorities. Our early career researchers are already somewhat disadvantaged by the precarity of the funding system - if we are going to invest the next generation of researchers in a particular area of research, we must ensure we do not run the risk of sidelining groups of researchers who have built niche capacity and capability in priority areas when those priorities change.

If we are to have a model with dedicated priority funds, care must be taken to ensure that we are not over-investing 'general' research funds into these same areas or creating an imbalance for other important research endeavors.

Emphasis is currently placed on research that has benefits for health, society, and the environment, but it is also important for us to invest in research that contributes to the advancement of knowledge. Our funding system does not currently have a strong mechanism to support blue-skies research outside of the Royal Society Te Aparangi. The majority of public and non-profit funds are in the medical/health sphere. Whilst important, exploring fundamental questions remains pivotal. In Australia, knowledge impact is recognised as a key component of research investment (see NHMRC).

Q23

Priority-setting process: What principles should guide a national research Priority-setting process, and how can the process best give effect to Te Tiriti?(See pages 28-29 of the Green Paper for additional information related to this question)

The Vision Mātauranga policy was published in 2007, before the disestablishment of MoRST and FoRST. First and foremost, reviewing this policy with relevant Māori partners should be considered, with regular review to ensure it is reflective of Te Ao Māori and Kaupapa Māori.

Having an overarching NZ research investment entity that includes Māori partners at its core would help to ensure Kaupapa Māori forms the foundations of the research environment in New Zealand.

Short and long-term priorities could be set by this entity in consultation with the research community, government, Maori and other relevant sectors. Guiding principles should include
- ensuring each priority is set with equity and inclusivity in mind
- the level of risk associated with not adequately resourcing areas of focus
- the benefits to New Zealand and the contribution made to the global endeavor
- the resource and capacity required to lead to effective outcomes
- the existing leadership capability in New Zealand to give effect to the priorities
- how we continue to support research knowledge and capability gained once deprioritised.

Q24

Operationalising Priorities: How should the strategy for each national research Priority be set and how do we operationalise them?(See pages 30-33 of the Green Paper for additional information related to this question)

Governance of priorities and funding investment should be consistent. An overarching/independent national research investment entity could provide this. The UKRI may be a good model to consider, which consists of multiple research councils designed to provide investments in a variety of research areas (Arts, Biology, Economic/Social, Physical etc), whilst also having ringfenced funds for strategic priorities.

This entity could contain a board of representatives from research organisations, government, Māori partners and relevant sectors. This board could then conduct a 5-yearly assessment of research priorities in consultation with the relevant communities, and hold an annual evaluation process to determine a) how well investments are being made b) whether the priorities need revising and c) capture any urgent priorities that need consideration.

Each priority could be headed by someone with appropriate expertise and adapted to fit the needs of the particular research area. Given the size of New Zealand and the potential for conflicts of interest, international members could be represented to ensure adequate knowledge and relevance.

Page 10: Section 4: Te Tiriti, mātauranga Māori, and Māori aspirations

Q25

Engagement: How should we engage with Māori and Treaty Partners?(See page 38 of the Green Paper for additional information related to this question)

As I am Pakeha, I don't feel it is appropriate for me to make recommendations on how Māori would prefer to engage.

However, from the perspective of researcher engagement with Māori, as a research manager, I have observed that there are only a small number of roles to advise on or support Māori engagement, and these roles appear to work across large/multiple areas, which may be a lot to ask of one individual. Researchers who are new to the country, and who do not have a well-formed understanding of mātauranga Māori, are not always introduced to pathways to develop their knowledge or ways to engage. Researchers can also be driven by the timeline of funding rounds, leading them to miss opportunities to engage at appropriate stages, limiting their ability to co-design appropriate projects.

One possible option could be to embed Māori engagement unit(s) in an overarching research investment entity, with regular local and national hui, training and appropriate resources for seeding project ideation and co-creation. This could form part of the Māori knowledge hubs indicated in the green paper.

Q26

Mātauranga Māori: What are your thoughts on how to enable and protect mātauranga Māori in the research system? (See pages 38-39 of the Green Paper for additional information related to this question)

Whilst the Vision Mātauranga policy is a fantastic resource, it is often acknowledged that iwi, communities and organisations have various interests, focus areas and challenges. Having dedicated resources that detail these, which are reviewed and updated regularly to reflect changes or new priorities, could be one way to help improve understanding amongst the non-Māori research community.

Q27

Regionally based Māori knowledge hubs: What are your thoughts on regionally based Māori knowledge hubs?(See page 39 of the Green Paper for additional information related to this question)

I like the concept of Māori knowledge hubs, which may offer a clearer path to engagement and understanding amongst non-Māori researchers. However, care would need to be taken to ensure those engaging with the hubs were seeking genuine collaboration, and not simply approaching hubs to fit funding criteria.

Page 11: Section 5: Funding

Q28

Core Functions: How should we decide what constitutes a core function, and how do we fund them?(See pages 44-46 of the Green Paper for additional information related to this question)

A sinular national research entity could be a good model for housing core functions. Research entities should be able to work with relative independence, whilst ensuring they have appropriate governance and funding investment (through the overarching entity). Core functions could be determined in a similar way to strategic research priorities, ensuring they align with both national needs and are able to contribute to global challenges. 'Core function' leads could be appointed, who have the ability to set direction, whilst reporting back to a board/overarching entity. Distinctions should be made between what constitutes a 'core function' compared to a 'strategic research priority', such as taking into account the longevity and stability required.

Q29

Establishing a base grant and base grant design: Do you think a base grant funding model will improve stability and resilience for research organisations?(See pages 46-49 of the Green Paper for additional information related to this question)

Yes

Q30

Establishing a base grant and base grant design: How should we go about designing and implementing such a funding model?(See pages 46-49 of the Green Paper for additional information related to this question)

Depending on the organisation, large portions of grant funding have to be diverted to overhead costs. Whilst it is necessary for organisations to function, it depletes the amount available for researchers to appropriately undertake research, including staffing and direct resourcing. Removing this from research grants with the introduction of a base grant model could therefore provide more stability and dedicated support for research projects.

Structurally, base grants should be open to all organisations undertaking research. Considerations must be put into place to determine both the nature and size of the research conducted, including the facilities required for the activity to take place. Research activity may also need to be considered on a regular (e.g. annual) basis, to ensure the funding provided is adequate for growth. An organisation may not yet be research-intensive, but if it is not provided with enough 'base grant' funding to help it get there, it would be disadvantaged.

This model may also need to consider how this aligns with the Performance-Based Research Fund, or whether this fund would be dissolved in favour of the proposed model.

Measurements would need to be considered from an equity and quality perspective. Not all research organisations will have the same level of outputs, and such measurements can have unintended negative consequences.
For example, publication metrics are often used as a primary assessment criteria, however:
- not every organisation will have the same access or capacity to deliver high publication rates
- different areas of research may have vastly different outputs
- publications do not always indicate research quality
- research may become narrower, with the pursuit of subjects that have a higher chance of publication at the expense of other research topics.

The base grant model should also be assessed on whether it would mitigate or exaggerate competition amongst research organisations for higher portions of base funding. This could be improved by taking into account research undertaken in collaboration with other organisations, rather than just focusing on which organisation hosts the project.

Page 12: Section 6: Institutions

Q31

Institution design: How do we design collaborative, adaptive and agile research institutions that will serve current and future needs?(See pages 57-58 of the Green Paper for additional information related to this question)

In terms of research quality, adequate research governance should be embedded in a national research investment entity, as is found in other countries. There appears to be no consistent guidance in this regard on a national scale, and no regular reviews conducted to adequately monitor the integrity, equity, diversity or inclusion of our research environment.

As mentioned elsewhere, bringing things together under a national research investment entity could be a good model in providing consistency and security. Housing strategic research priorities and core functions under this entity may allow for better collaboration and less competition than implementing multiple independent organisations. It would also enable greater financial stability and decision making, should investments and priorities require adaptation.

Q32

Role of institutions in workforce development: How can institutions be designed to better support capability, skill and workforce development?(See page 58 of the Green Paper for additional information related to this question)

Longer-term contracts for research specific positions should be supported, with increased fellowship opportunities that provide adequate salary cover for these roles. A national research investment entity could provide this, alongside a suite of national-level training programmes, co-funded placement options for researchers in industry or other appropriate organisations. International placement opportunities could also be developed, enabling domestic researchers to develop broader skills and networks, as well as accepting international candidates for placements in New Zealand. Whilst not without challenge, these placements would bring new knowledge, skills and enhanced capability to our workforce.

Q33

Better coordinated property and capital investment: How should we make decisions on large property and capital investments under a more coordinated approach?(See pages 58-59 of the Green Paper for additional information related to this question)

Respondent skipped this question

Q34

Institution design and Te Tiriti: How do we design Tiriti-enabled institutions? (See page 59 of the Green Paper for additional information related to this question)

I do not feel I have the appropriate knowledge to address this question, however, I would advocate that any design needs to consider how these institutions connect with Māori owned organisations and Māori principles such as land use and data sovereignty.

Q35

Knowledge exchange: How do we better support knowledge exchange and impact generation? What should be the role of research institutions in transferring knowledge into operational environments and technologies?(See pages 60-63 of the Green Paper for additional information related to this question)

Partnership funds and placements could better enable knowledge exchange, possibly via the expansion of platforms such as Callaghan innovation.

Whilst the funding agencies tend to publish the results of funding rounds, we do not currently have a comprehensive system that disseminates the outcomes of publicly funded research. There is also limited follow up on the outcomes of significant programmes of research at present. Whilst the majority of funding agencies require final reports, this does not capture the impacts of research beyond the end stage of the project.

It would be pertinent to design a structure/system that can capture and evaluate outcomes/impact. Providing transparency of what is being invested in, what research is being conducted and the outcomes of such research could enable a better connection between academia, industry and society.

Page 13: Section 7: Research workforce

Q36

Workforce and research Priorities: How should we include workforce considerations in the design of national research Priorities?(See pages 69-70 of the Green Paper for additional information related to this question)

As mentioned previously, the introduction of strategic research priorities may have the potential to offer more security to researchers joining the workforce. However, depending on the longevity of those priorities and what happens when those priorities need to be shifted, this could have unintended impacts on the ability to retain and support the talent fostered. Pathways should be developed for researchers who developed under certain priorities to ensure they are not sidelined or their skills and capability rendered irrelevant.

Q37

Base grant and workforce: What impact would a base grant have on the research workforce?(See pages 70-71 of the Green Paper for additional information related to this question)

Base grants could enable better support for new and emerging researchers by allowing project funding to be used for increased FTE and salary coverage (depending on how much other grant funding was impacted by the shift of funding to base grants).

In addition, it could enable organisations to fund specific positions for those on precarious contracts. However, organisations would also need to be equitable in the distribution of these positions. They should ensure they support areas of research and communities that are most impacted, provide researchers with appropriate mentorship and support for their growth/development, and avoid distributing these positions based solely on the needs of more senior researchers.

Overarching research governance could include regular reviews of how organisations train and develop their early-career research workforce, which could be obtained initially from reports on how these organisations implement the base grant funds.

Q38

Better designed funding mechanisms: How do we design new funding mechanisms that strongly focus on workforce outcomes? (See page 72 of the Green Paper for additional information related to this question)

In terms of attracting talent, the current immigration model places significant limitations on recruitment. Introducing a more prompt process with consideration for the positions they're in would go some way to improving this. Further, the current funding system places restrictions on funding for researchers who are currently deemed to hold residency or citizenship. However, many of our researchers who moved to New Zealand from overseas have been here for a considerable number of years, and are unable to attain this status due to the fixed-term nature of their roles. Whilst we need to ensure we support our domestic talent, we also need to be able to retain the talent we recruit. We could mitigate this by reducing these limitations on funding applications, or having pools of funding available for those without residency status, considering the longevity of their time in research-related positions in New Zealand.

There are very few fellowship opportunities for new or emerging researchers, and many of these do not provide full salary coverage. This can have an impact on both the ability of research organisations to support those researchers and risks us losing both domestic and international talent. Building inclusive fellowships into the foundation of our research funding system is therefore essential. Specific emphasis should also be placed on providing unique opportunities for underrepresented groups, who may not always have the required track record of their overrepresented counterparts.

Importance must be also placed on the design of the research team. It is not simply enough to include early career researchers in applications, but to ensure that they have fair representation, robust development opportunities and a secure communication pathway to contribute to project design. The capability of the PI in terms of leadership track record with regard to the development of their research group should also be considered - just because someone has been awarded funding before or has a recognisable name does not necessarily imply that they are appropriately equipped to provide the leadership needed in this regard. We tend to ask this of early career researchers when they apply for fellowships, and it would seem reasonable to consider this for other projects too.

Page 14: Section 8: Research infrastructure

Q39

Funding research infrastructure: How do we support sustainable, efficient and enabling investment in research infrastructure?(See pages 77-78 of the Green Paper for additional information related to this question)

Shared research facilities and infrastructure are essential for collaboration, and increased investment in large scale equipment and capital could achieve this goal.

In principle, the idea of co-located or centrally hosted facilities could be beneficial. This may reduce the challenges associated with facilities housed in host organisations, including the decisions on what happens to the facilities if one or more organisations no longer require access, depreciation calculations and ongoing maintenance. However, decisions about what happens to these facilities if they are no longer relevant to research conducted in New Zealand would still need to be made.

A national facilities/equipment database could provide clarity on what is currently available, improving the connection between researchers and organisations.

From the factors listed, I feel the main considerations should be:

- the potential value of research infrastructure to support high research performance
- the nature of use and whether multiple users could benefit from access
- resilience and sovereignty (including governance)
- efficiency and the potential to make better use of capital

I also feel that international cooperation is important if we wish to expand the reach of our research, which may also include agreements on the use of facilities overseas to establish better collaboration and access for our research community.