#138

COMPLETE

Collector: Web Link 1 (Web Link)
Started: Monday, February 14, 2022 2:39:31 PM
Last Modified: Tuesday, April 26, 2022 9:07:07 AM
Time Spent: Over a month

Page 2: Section 1: submitter contact information

Q1

Name

Phillip Rendle

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 **Yes**

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?

Chemical 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 believe the research Priorities should be very focussed to the point that the funding available for the Priority should be sufficient to be able to make significant headway and achieve real results for that Priority. Given that the Priorities should be very focused (and assuming that the funding quantum available requires tight scope), then there needs to be significant funding remaining for non-Priority assigned research. If this is not the case, researchers will feel that they have to be attached to a Priority to survive and then as a result the Priorities become broad catch-alls that are therefore ineffective at making a real difference in the specified area. This situation has arguably been demonstrated in the NSC experiment.
A key principle in determining a Priority is choosing a niche area where there is existing NZ capability as this allows NZ to make a real, timely difference in that area in an internationally competitive manner.

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)

As mentioned in the green paper, these should be transparent and robust enough not to be high jacked by one institute or research area. Defining a Priority should have input from talented scientists, future thinkers and include a global perspective. Priority setting should be nimble and Priorities able to evolve over time if appropriate.

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)

Assuming the Priorities are collaborative over several institutions and MIBIE continues with the main contractor/sub-contractor model, the main contractor needs to be empowered to be able to make sure sub-contractors deliver and stay focussed on the Priority when using the Priority sub-contracting funding.
Efficiency of allocating funding needs to be examined. A huge amount of researcher time goes to writing large fundable bid documents with only a small chance of them being successfully funded. This is very inefficient and has a negative impact on a researcher's moral. It also shows a lack of respect by the funder of the researcher's time and energy.

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

Q25

Respondent skipped this question

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

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)

This is difficult. One key challenge in the current environment is to make sure that those with knowledge and experience in mātauranga Māori do not become overworked and stretched too thinly. A key current focus is to bring more Māori up through STEM subjects at school.

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'm not appropriately experienced to comment.

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)

I think this should be basically as described in the green paper, that is:
Is it essential to NZ's functioning as a country to meet the obligations the government has to New Zealanders and internationally?
Can NZ afford the activity to stop and start at the whim of Priority setting and other research funding availability?
Another item that should be core funded is key unique expensive equipment accessed by many. Core funding these will ensure a national strategy around what is bought and improve ease of access which will maximise use. Access to this funding should be controlled by a very internationally aware and technically literate committee.

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)

Looking at the crumbling research infrastructure in NZ and insecure career paths of many researchers, a new model is definitely needed here. I support bringing research grants in line with other countries. As identified in the green paper, the difficulty here is that the scope of this review is primarily around the operation/funding of CRIs and Callaghan Innovation, however the research funds being evaluated are also accessed by other entities including universities and independent research institutes.
The per annum base grant could be weighted on how much RSI funding the research 'team' has received on average per annum since they started receiving RSI funding, with maximum of the past 6 years used in the calculation. This would help soften yearly fluctuations in funding and give a successful team time to recover/reinvent itself in the case of sudden loss of funding. I think 'team' should be used rather than institution given the size of some institutions (especially if some CRIs merge). The question then comes how to define 'team'. It probably needs to be equivalent to a School/Institute at university or division/team at a CRI and be discipline/capability related and be able to be linked to financial cost-centres. Maybe 20-50 full time staff equivalents would be appropriate. This type of model would also encourage collaborative activities within teams which can counter a real issue within schools at universities.

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)

If the KPIs of the research institutions are set correctly then these will naturally be passed down to the staff through normal management processes. The research funder then needs to trust that the research staff are fulling their days with activities that meet the KPIs and not be as prescriptive on project milestones. KPIs would be something along the lines of doing research that leads to outputs that have a reasonable chance of demonstratable impact, either direct economic outcomes to NZ or improved quality of life for NZers.
Default ways to calculate pricing, contracting, IP arrangements and secondment arrangements between government research organisations should be defined to make collaborations easy, predictable, and hence quick to put in place.

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)

Institutions focussed on capability and delivery to NZ will seek good staff and want to keep hold of them and develop them. Institutions focussed on individual projects in an uncertain funding environment will worry more about future financial risk than staff retention.

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)

Attitude of researchers and minimalizing contractual hurdles is more important than co-location to enable stronger connections between disciplines. Within a discipline, co-location does have the advantages described in the green paper.

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)

Unsure

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)

Two issues I have seen that have hindered getting impact from research outcomes have been:
1. Not having a clear knowledge of what 'excellent' looks like internationally. Time and resource can be spent on commercialising research that wouldn't 'cut the mustard' internationally. Our way to keep up to date with what 'excellent' looks like and so how to be competitive internationally is to do fee-for-service contracts for international clients.
2. There is a fear of being 'ripped off' by international licensees of NZ technology. This has hamstrung negotiations to the point that deals do not end up getting put in place at all. In addition, commercialisation opportunities that arise are not leapt on and 'given a go'. Care is taken to make sure it is the 'right' opportunity to such an extent that the licensee gets bored and moves on. There needs to be higher risks taken and the acknowledgement that a lot of factors result in external investment, not just the technology itself.

Research institutions need to be highly involved in transferring of knowledge but need to be guided through this process by experience centralised resources.

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)

It takes a lot of time to get a new capability up and running from scratch to form a world class team and therefore Priorities should take account of what capabilities NZ already has and the ability of those to reach critical mass by the attraction of additional talent.
Researchers' time and energy should be highly valued and respected when designing and implementing Priorities.

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)

It would provide more surety to the institution and so therefore should lower the hurdle to transferring good people to permanent contracts – an important factor in retaining a quality workforce.

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)

The funding of a significant number of two-year post-doctoral fellowships should be returned, especially where is brings NZers back to NZ. Several of our current senior leaders where brought back to NZ under the old FRST post-doc scheme. Getting offshore experience is important for good early career researchers who have done their studies in NZ and should be encouraged because:

1. It builds researcher confidence – they learn they can foot it with international researchers;
2. It builds connections and potential future international collaborations; and
3. It gives the researcher the opportunity to learn what 'excellent' looks like in an international context.

We then must get these people back once they have the experience and funding of multiple post-docs a year achieves that. Post-doctoral research is also a good way to try out new research ideas and build new/evolve existing capability.
The key challenge is then to make sure that these people do not end up on many sequential post-docs, but the good ones end up with permanent jobs. Institutions need to be driven by building excellent relevant capability that is of use to funders but also able to be nurtured when the winds of funding change do not blow the institutions way. The base grant funding model proposed could help achieve this if designed correctly as would the KPIs expected of the institutions.

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)

Crumbling research infrastructure (buildings) has become a real issue in the country as it had for education and health. Priorities and capabilities change and evolve over time and so infrastructure needs to be flexible enough to cope with these changes, growths, and reductions. Space needs to be used efficiently and so there needs to be researcher confidence that they can request and get more space when they can justify it. In this environment researcher mangers should be more open (and maybe should be also incentivised) to give up space that they don't need - a common problem in research institutions. One way to free up space is to provide cheap warehouse storage space for instruments currently not required. Researchers are much more open to putting something into storage than throwing it out.
