

## **Te Ara Paerangi - Future Pathways. Submission of feedback from early to mid-career researchers of School of Food and Advanced Technology**

### **Summary**

This document summarizes the feedback provided by early- to mid-career researchers of the School of Food and Advanced Technology, Massey University. In February 2022, the organizing committee representing the researchers, sent an invitation to 17 researchers. The invitation focussed on two main priorities from the green paper: funding and workforce. However, researchers were encouraged to provide feedback on other priorities if they wished. Of the 17 researchers, the committee received feedback from 8 of the individuals. All 8 provided feedback by email, of which 2 researchers also followed this up by verbal feedback via a video call. Below are the key messages from the feedback provided.

### **Key messages**

#### **1) Administrative obstacles**

Researchers must consider a number of administrative costs when applying for funding with a limited budget. For example, they need to consider high university fees and overhead which means less money goes into the project itself. This can result in some researchers assigning project roles to a master's or PhD student when an experienced postdoctoral researcher would be more appropriate for the timeframe given. As such, research projects are realistically expected to make slow progress and provide limited outcome.

#### *Recommendations:*

- Put a cap on admin fees and overheads that go to universities particularly for early career researchers in order to motivate them to progress their career.
- Increase opportunities for early career researchers. Increase the timeframe of funding projects.

#### **2) Lack of support and mentorship, complicated funding applications and selection bias**

Researchers have noted that there isn't enough mentorship or support from government when it comes to funding applications particularly for new and early career researchers. Many researchers have other commitments from their main funding source as well as teaching. Time is a huge factor for many researchers which puts them off applying for the more complex research funding applications. Some of the funding applications are very lengthy and complex. Some of the talented researchers who are coming from overseas get put off continuing research in NZ as they are expected to only focus on the tasks and commitments of their main funding source and are not able to pursue the research areas they are passionate about.

Other researchers noted there is evidenced bias with regards to researchers who are successful in obtaining funding. It was noted that some researchers are marginalized such as women and ethnic minorities. Additionally, early career researchers affiliated with well-known senior academics, appear to be more likely to receive funding. One researcher used the example of the Science for Technological Innovation seed grant. This grant has been publicised to encourage independent research from early career researchers and yet most of the successful grants have named professors and seasoned researchers as investigators. Similarly, large early career researcher grants such as the HRC Emerging Researcher First Grant, doesn't pay for any portion of the principle investigator's FTE component and

yet expects an early career researcher to lead a 250k research project while being paid from another funding source. And usually that other funding source is from a senior academic or professor that will have a vested interest in the early career HRC project.

*Recommendations:*

- More mentorship and support from government in the way of training events.
- Conditions put on the larger project grants that: early and mid-career researchers who are funded by these grants, should be assigned time to seek independent research during their termed contract.
- CRIs and Institutions funded by government (eg PBRF and CoRE) should also be expected to allocate time for their early and mid-career researchers to seek independent research.
- It would be ideal to have examples of successful previous applications made publicly available.
- Simplify the funding applications—let scientists be scientists—not salesmen.
- Better support of marginalized researchers such as women and ethnic minorities. Reduce “evidenced injustice”. And support genuine independent research from early career researchers.
- Research grants aimed at early and mid-career researchers should allow partial funding of the principle investigator’s salary.
- There needs to be funding available specifically for helping researchers to apply for funding. For example, funding mentorship programs.

3) Fixed term contracts

Early and mid-career researchers are generally on fixed term contracts both in institutions and CRIs. No job security, lots of uncertainty (for example difficult to get a mortgage). Academia will keep training and losing researchers which are getting absorbed by the industry with more competitive pay and better job security.

Fixed short term contracts also make it difficult for early and mid-career researchers to generate preliminary data that can be used to increase chances of success when applying for funding.

*Recommendations:*

- More permanent roles need to be made available to early career and mid-career academics.
- Longer fixed term contracts—2 years is not enough to make any kind of meaningful progress on a research project or produce preliminary data for funding applications.

Other points raised by the researchers:

- There is too much emphasis on publication track record as the main criteria for successful funding applications. Other measures of success need to be considered particularly to encourage researchers to be involved in industry and commercial projects with immediate applications to the public, health and economy.
- More focus on people development not project content
- Reduce the toxic competitive environment created by limited funding
- More support and training on Vision Mātauranga aspects of funding applications
- Sustainability research specifically on re-use or recovery of by-products from agriculture, should be made a research priority in NZ