

## Submission on Te Ara Paerangi Future Pathways Green Paper 2021

Research, Science and Innovation, MBIE

I read with interest the Green Paper, and I started out trying to make my submission using the on-line form. But I found that my views were not really going to fit into those categories, so I am taking the opportunity to write instead.

I am not convinced that there is evidence that the RSI sector is particularly poorly organised in New Zealand. It is likely that a nation-wide consultative recalibration will result in new words, but not really substantively different foci. Let's face it: climate, human health, indigenous studies, environmental impacts, biodiversity, energy generation and distribution, aging population, hazards, childhood wellbeing, our place in the Southern Ocean -- they're all going to have a place in whatever we design. Is wholesale rearrangement of the furniture really a good use of our time and effort?

What is obvious to everyone in the research sector is the devastating effects of insufficient funding. This claim is not controversial. Indeed, current government policy recognizes this problem, with a goal of reaching 2% of GDP being spent on research by 2025. Symptoms of scarcity include: competition for resources among scientists who ought to be working together; review panels stressed and distressed by having to decline numerous outstanding proposals; excellent researchers leaving a seriously under-resourced environment; "prestigious" research fellowships that are not fully funded; research institutions (CRIS and Universities) making short-term cuts to the detriment of long-term goals; a worrying lack of investment in post-doctoral fellows. Simply put, there's nothing wrong with RSI in New Zealand that significantly greater government investment couldn't fix. (For a recent version of many articles on this, see [N. Gaston, \*The Conversation\*, 2 June 2021](#)) In a tree without enough acorns, squirrels start to eat their young.

If you do go ahead and invent some "new" priorities, they must be supported by clear processes that will dedicate adequate resources to them. It is just too easy for people to be dazzled by new innovative exciting ideas, and deflect funding from boring old monitoring. There must be some kind of ring-fencing to maintain essential but unexciting science (see, for example, [T. Balsden, \*The Conversation\*, 9 December 2020](#)). Having said that, there also needs to be some "agility" funding to enable research into areas not envisaged by priorities.

One principle I would like to recommend is that of balance and equilibrium. A functional system would be able to strike a balance between "opposing" forces, and re-equilibrate as situations and opportunities change. For example, we need balance between applied and "blue sky" research; balance between supporting ongoing projects and risky new initiatives; balance between helping early career researchers and rewarding long-term successful researchers; balance between strongly Treaty-focussed research and that which is not; balance between Government-led research and individual-led research. A really good example of a balanced and useful approach to decision making is [Excellence in research](#) by G Evans et al., MBIE, 2021.

Finally, on an operational level, I would like to indicate strong support for the MBIE Science Whitinga Postdoctoral Fellowships, which was a great idea, and one that should happen every year.

Please do not hesitate to contact me if I can be of further assistance.

A handwritten signature in black ink, appearing to read 'Abigail M Smith', with a long horizontal flourish extending to the right.

Professor Abigail M Smith  
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Privacy - 9(2)(a)

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