Te Ara Paerangi - Future Pathways

Submission to the Ministry of Business Innovation and Employment futurepathways@mbie.govt.nz

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Section 1: Contact information

The contact person for this submission is Lesley Brook, Privacy - 9(2)(a)

Section 2: Submitter information

This is a joint submission from:

- Professor Leoni Schmidt, Director: Research and Postgraduate Studies, Otago Polytechnic Ltd;
- Lesley Brook, Research Projects Coordinator, Otago Polytechnic Ltd;
 and
- Jenny Aimers, Research Coordinator, Otago Polytechnic Ltd.

Section 3: Research Priorities

Value of different kinds of research

We recognize the need to set research priorities. We suggest that research aligned with the priorities should be explicitly open to a wide variety of research disciplines and methodologies. Pedagogical research, creative research, applied research with and for tangata whenua, professions and communities, not just industry – all these are valuable in their different ways for New Zealand, contributing to transformational learning and, for example, to social justice and engaged citizens capable of critical thinking.

Consistent terminology

Currently "research" and "science" are used interchangeably, for example "research priorities" but "National Science Challenges". We suggest using the word "research" consistently instead of "science". This will help ensure that research is broadly defined (including for example mātauranga Māori and creative research) and its wide variety is valued, while still recognizing that some research may be more expensive to conduct and require different facilities.

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

We agree the Te Tiriti o Waitangi, mātauranga Māori and Māori aspirations for research and as researchers need to be embedded in the New Zealand research system. Te Pūkenga is in the process of developing a New Zealand specific ethics framework for research that incorporates Māori considerations, which is likely to be relevant beyond Te Pūkenga.

Section 5: Funding

Funding models that support research time

The New Zealand research system includes academic staff in universities and Te Pūkenga. See ss 252, 267, 268, 315 and 318 of the Education and Training Act 2021. In particular, Te Pūkenga academic staff teaching on degree programmes are expected to be research-active. See Criterion 8 (page 11) and Criterion 5 (page 14) of the New Zealand Qualifications Authority's *Guidelines for approving and maintaining degrees and related qualifications*. However, there are currently significant inequities in funding that unfairly limit the ability of Te Pūkenga academic staff (currently employed by subsidiaries) to undertake research. They are required to carry a much higher teaching workload than their university counterparts and therefore have much more limited time available for research. We suggest that the funding model for degree programmes offered by Te Pūkenga should be reviewed and revised to address this funding inequity for research.

Funding core research functions

We agree that core research functions should have reliable funding, including national data collections, for example for geophysical and weather data. A systemic and national approach will help to ensure that such resources are readily available to all, including to independent and creative researchers and to industry. The NZ ORCID Hub is another core research function, and increased support for integrations at the institutional level would help to maximise the benefits of ORCID for the New Zealand research system.

Base grant funding

We support in principle the idea of base grants for operating costs for critical research facilities, "to keep the lights on". We also recognize the need to avoid unnecessary duplication of research facilities; New Zealand does not need one of everything everywhere. We suggest that where government funding is allocated to support facilities, a condition of funding should be equitable access to those facilities for New Zealand researchers outside of the institution that is hosting that facility, including researchers

outside the universities and Crown Research Institutes, i.e. providing access for researchers in industry and at Te Pūkenga and independent researchers. This would help ensure that the facilities benefit the whole research system in New Zealand. The institution hosting any public-funded research facility should not also play the role of gatekeeper controlling access to that facility. Another condition of base grants should be that the primary purpose of the facility is to benefit New Zealand, rather than the host institution.

Section 6: Institutions

Funding models that promote collaboration

Funding models provide a valuable way to promote desirable behaviours within the research system in New Zealand. We suggest that the strengths and advantages of multi-disciplinary research ought to be recognized and promoted through research funding models, by encouraging or favouring research that is not only multi-disciplinary but also multi-institutional. We suggest that the focus of Te Pūkenga on applied research and our researchers' complementary expertise and networks with mana whenua, industry, professions and communities would add value to many university and CRI research projects. Promoting collaboration over competition is likely to contribute to fewer but higher quality applications for research funding. An Expression of Interest process can help to identify which potential applicants should be encouraged to collaborate.

Open Access publication

We agree that research institutions have a role in transferring knowledge to and co-creating knowledge with mana whenua, industry, professions, communities and institutions. We suggest that funding to support high quality open access publication will help to ensure that New Zealand research is accessible by all those for whom it is relevant, and would be more cost effective in achieving impact of research for New Zealand than increasing the costs of research by paying author publication fees to commercial publishers. We suggest also that the Performance-Based Research Fund is the appropriate mechanism to incentivize New Zealand researchers to embed impact, aligning their research with research questions that are relevant to end users and facilitating effective knowledge transfer.

Section 7: Research workforce

Precarity of employment

We agree that precarity of employment in the research system in New Zealand is an issue that should be addressed. We suggest it is important that consideration of this issue not be limited to post-doctoral staff and laboratory technicians. There are many different roles in the research system which provide crucial support functions for research that benefits New Zealand in many different ways. These roles include workshop technicians (supporting staff and degree and postgraduate students in Product Design and Fine Arts for example), research assistants, curators, and project managers. The opportunity to consider research support roles should encompass this variety.

Research careers

We suggest that there is an opportunity to strengthen both the career path for researchers outside tertiary education organizations and Research and Development in industry through a suitable grants scheme that supports the employment of post-doctoral staff to undertake research.

Section 8: Research infrastructure

Our comments above regarding funding core research functions and base grant funding are also relevant to research infrastructure.

Research facilities

We refer also to our comments above regarding the value of different kinds of research. The types of research facilities that are needed for New Zealand research include not just laboratories but also workshops and exhibition galleries.

Online library

Access to comprehensive library resources is essential for research, but is inconsistent across New Zealand, and the Te Pūkenga network has significantly inferior access than universities. Delays in access or lack of access to all the most up-to-date research globally limits New Zealand research. We suggest that consideration be given to negotiating New Zealand-wide subscriptions for research publications. This collective purchasing power is likely to be more cost effective than having multiple institutions managing their own subscriptions with much overlap. More importantly, this approach would improve equity of access to published research, not just across all universities and Te Pūkenga and CRIs, but also for tangata whenua and industry and community-based researchers.

Thank you for considering our submission. We look forward to participating further in this important dialogue.

Prof Leoni Schmidt, Lesley Brook and Jenny Aimers