



New Zealand's Biological Heritage National Science Challenge

Terms of Reference: International Science Advisory Panel

The purpose of the International Science Advisory Panel (ISAP) is to provide advice and report on science quality, excellence and potential impact of Challenge investments, across Strategic Outcomes, and at Impact and whole-of-Challenge levels. The ISAP is ultimately accountable to the Governance Group (Mana Rangatira), but will engage operationally with the Science Leadership Group (SLG). The ISAP will also peer-review contracted investments, under the criteria in Appendix 1, as part of an annual review of contracted workplans, and present a brief report to the SLG for consideration. The ISAP will report annually to Mana Rangatira, to provide assurance that appropriate standards of science quality, excellence and impact are being upheld across the Challenge's investments.

As a secondary function the International Science Advisory Panel will report to the SLG on opportunities for connection to global research initiatives that will improve science quality and impact, and assist in delivery of the Challenge Mission.

Scope

The ISAP will only consider research funded directly through the Challenge envelope. During the review of Challenge research the ISAP may need to consider the connections between Challenge funded research and highly dependent aligned or co-funded research. The scope of the ISAP will be to:

- Review Challenge funding envelope investment proposals for science quality and relevance, with recommendations to strengthen research quality being made to the SLG and to Mana Rangatira. More specifically, consider the international relevance of underpinning research questions, the relevance of the research questions for achieving impact, the quality of the science, the likely impact of outputs at an international level, the breadth, depth and quality of science capability in the investment team and the degree of international connectedness of the investment.
- Review each investment as part of the annual review cycle under the same criteria as Appendix 1.
- Review science quality at the Impact and Challenge level to determine if the Challenge is delivering science outputs that are at the level of quality expected for a consortium the scale of the Biological Heritage NSC.
- Consider integrative activities and research that operate across Challenge Projects and Programmes and determine whether these are sufficiently connected, and if the Challenge is delivering science outcomes above and beyond individual investments.
- The Challenge retains the final decision as to whether to proceed with a particular investment.

Composition

The ISAP will have the following composition and characteristics:

- Appointment of the Chair and ISAP panellists will be done by the Challenge Directors once approval has been sought, and received, from Mana Rangatira.



- The ISAP will be appointed for the remainder of Tranche 2. A sufficiently long term is required to allow the panellists to become deeply familiar with the Challenge, the Mission, and the New Zealand science system. At the discretion of the Challenge, the Chair may be mandated to add new panellists (or to seek one-off peer reviews on specific topics) if it becomes apparent that key science knowledge is absent from the ISAP.
- A majority of panellists will be independent of all Challenge Parties and not actively engaged as collaborators in Challenge investments or closely aligned research.
- The panellists will include at least one individual with expertise related to each Impact, as well as at least one individual active in international indigenous research who can properly evaluate the science quality of Vision Mātauranga investments. Expertise in other cross-cutting needs, such as citizen science and social science expertise, will also be considered by Mana Rangatira. The ISAP will therefore comprise at between five and eight members, including the Chair.
- Panellists will have research backgrounds that enable them to understand mission-led research and how Challenge investments differ from investigator-lead research.

Operational Principles

The ISAP and SLG will work together in accordance with the following principles:

- The ISAP will review all investment proposals before submission of those proposals to Mana Rangatira. Following ISAP meetings the Chair will submit to the SLG and Mana Rangatira a written report with recommendations regarding each investment.
- The SLG and Project Leaders will cooperate to either accommodate, or rebut, any recommendations in the revision of investment proposals. Investments will document and demonstrate this process at the time of submission for approval back to Mana Rangatira.
- The ISAP will review all investments as part of an annual review cycle and report to the SLG and Mana Rangatira on the same criteria as used to evaluate proposals. In particular, the report will detail any areas of concern and recommendations for improvement.
- Panellists will work in the best interest of the Challenge and declare any potential or actual conflicts of interest.
- Panellists will not share any material deemed commercially sensitive, culturally sensitive or in any other way confidential, by the Challenge or Challenge Parties.
- The ISAP will have an advisory role and not a decision making role within the Challenge.
- Every two years the Chair will lead a self-review of the ISAP membership and composition.

Administrative Processes

The Challenge and the Challenge Host, Manaaki Whenua - Landcare Research, will provide all administrative support for the functioning of the ISAP. The following principles will ensure efficient operation of the ISAP:



- The ISAP will meet in New Zealand once every second year and remotely other years. Other meetings, held remotely, may be required to evaluate individual investment proposals.
- The Chair will receive a small honorarium from Challenge Envelope funding whereas Panel members will be expected to cover their time 'in kind', in keeping with international standards for peer review in science.
- Challenge Envelope funding will be used to pay for reasonable travel costs for ISAP members to attend review meetings. Other direct costs may be covered following discussion between the Chair and Directors.
- The Chair will chair all meetings and guide the ISAP to reach a consensus on recommendations made to the SLG and Mana Rangatira.
- Following each meeting of the ISAP, the Chair, with input from other Panellists will provide a written report to SLG and Mana Rangatira containing all recommendations.
- All panellists will be available for out-of-session consultation by the SLG regarding any matters of science quality and relevance. The time involved in giving such advice shall be consistent with the voluntary nature of the ISAP role.

Appendices for Reference

Appendix 1: Checklist of criteria for reviewing Challenge investments

Further information about the Challenge: www.bioheritage.nz/



Appendix 1

Checklist of Criteria for Reviewing Challenge Project Proposals for International Science Advisory Panel

The purpose of the International Science Advisory Panel (ISAP) is to evaluate and report on science quality, excellence and relevance of research for new proposals, and at the Strategic Outcome, Impact and Challenge-level to the Strategic Leadership Group (SLG). The ISAP will also review progress of contracted investments as part of an annual review process, and report these findings to the SLG and Mana Rangatira.

The International Science Advisory Panel will also report to the SLG on opportunities for connection to global research initiatives that will improve science quality and relevance and assist in delivery of the Challenge Mission.

The criteria below apply only to the review of investments prior to a recommendation by the Challenge's SLG to Mana Rangatira for final approval. The Terms of Reference deals with the wider role of the ISAP as outlined above.

Criteria for Approval of Challenge Investments

In assessing project proposals (and during the annual review process), please consider:

- The quality of the science and the likely impact of outputs at an international level;
- The quality and international relevance of the major research questions;
- The strength and capability of the team;
- The ability of the team to work across knowledge systems, specifically, but not limited to, Mātauranga Māori;
- The relative strength of the proposed research for creating impact, and the relevance of the investment for achieving the Challenge's Mission of reversing the decline in biological heritage;
- Identifying key international initiatives where connections could strengthen the investment.

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