



Artificial Intelligence Researchers Association

Science System Advisory Group (SSAG) submission

About us

The Artificial Intelligence Researchers Association (AIRA) is a not-for-profit representative body established in 2021 to support the production and dissemination of artificial intelligence research.

The Association connects, supports and provides a voice for the artificial intelligence research community, with all its sub-disciplines, to position Aotearoa New Zealand as a frontrunner internationally in leveraging this transformational technology to benefit society.

The Association currently has over 480+ members from across the country including from all eight Universities, all Crown Research Institutes, and the wider research community. Annually we host a [conference](#) as the meeting point of this community.

Membership is open to all individuals who are actively researching Artificial Intelligence (AI) or in an area related to or using AI, whether at postgraduate level, in industry, at a Crown Research Institute or Regional Research Institute or independent research organisation, or as a University academic.

For more information visit www.airesearchers.nz

Submitted by: Jannat Maqbool, Executive Director (email admin@airesearchers.nz)

1. Strategic Research Expertise for the Next Two Decades

Over the past decade, **Artificial Intelligence (AI)** research has played a pivotal role in shaping Aotearoa New Zealand’s digital, economic, and scientific future. From precision agriculture to conservation, from wildfire prediction to language revitalisation, New Zealand researchers have shown global leadership in applying AI to real-world challenges, often grounded in local values and contexts.

The 2024 AI Researchers Association whitepaper, “[Aotearoa New Zealand AI: A Strategic Approach](#)”, emphasizes that AI is no longer a standalone domain—it is an enabler of transformation across the entire science and innovation ecosystem. AI allows us to make sense of large and complex datasets, simulate and forecast natural and social systems, personalize public services, and automate routine processes across government, health, education, and industry.

Over the next twenty years, deep research expertise in AI will be essential for ensuring digital sovereignty, addressing climate change, safeguarding public health, improving education outcomes, and supporting indigenous knowledge systems. New Zealand must not only be an adopter of foreign AI technologies, but a **developer of locally appropriate, socially responsible, and globally relevant AI systems**.

To achieve this, research prioritisation must occur at three levels. At the **national level**, government should define long-range missions—such as net-zero emissions, ethical digital transformation, and inclusive public services—with AI embedded as a critical enabler. At the **sectoral level**, industries must collaborate with researchers to co-invest in areas such as AI in agriculture, energy, logistics, and education. At the **local and institutional level**, universities, CRIs, iwi and hapū should define research directions that reflect regional strengths, indigenous values, and emerging innovations.

Selecting which research to fund must consider more than academic excellence. Criteria should include alignment with strategic missions, inclusion of Māori knowledge systems, the potential for inclusive impact, and contribution to long-term resilience. In AI, additional criteria—such as transparency, fairness, and safety—are essential to ensure public trust and global competitiveness.

Research roadmaps are crucial for building long-term capability. They create a shared vision, define development stages, and guide investment. The AI whitepaper itself serves as a roadmap, outlining how AI can support health equity, environmental sustainability, public sector innovation, and cultural revitalisation. Without such roadmaps, funding can become fragmented and reactive, limiting both impact and scale.

2. Rationalising Funding Mechanisms

New Zealand's current research funding system is dispersed across many agencies and programs, which can lead to inefficiencies, overlap, and gaps—particularly for cross-disciplinary domains like AI. While diversity of funding sources can encourage experimentation, **greater coherence and coordination** are urgently needed.

Rather than collapsing all funding into a single entity, we propose a more **networked funding model**, where specialised agencies work under a common strategic framework, guided by national missions and supported by shared platforms. This is especially important for AI, where research spans sectors and requires close alignment between academia, government, and industry.

A flexible suite of funding instruments is essential. Short-term grants are useful for applied projects, but long-term programmes are necessary to build deep expertise and research infrastructure in AI. Fellowships help retain early-career talent, while innovation-focused funds support the translation of research into impactful services and products.

To balance excellence, impact, and inclusion, funding agencies must use transparent, mission-aligned evaluation frameworks. For AI, this includes assessing projects on ethical integrity, openness, cultural alignment, and long-term utility—not just academic citations or commercial potential. In line with the whitepaper's recommendations, **dedicated funding for high-risk, high-reward AI research** is essential to encourage breakthroughs in areas such as climate forecasting, machine learning interpretability, or low-resource language technologies.

Research involving Mātauranga Māori should be governed and designed in genuine partnership with Māori. Co-design, shared governance, and appropriate intellectual property arrangements must be central. In the AI context, this includes supporting Māori-led innovation in areas such as AI for te reo revitalisation, whakapapa-informed data structures, and digital marae platforms.

AI research also relies heavily on **digital infrastructure**—such as supercomputing, secure cloud environments, and trusted data access. These are capital-intensive, and must be funded at a national level or through coordinated international collaboration. Without shared AI infrastructure, many of New Zealand's research institutions will be unable to compete globally or even contribute effectively at home.

3. Building and Retaining the Research Workforce

New Zealand's AI research community has grown significantly in recent years, with centres of excellence emerging across universities and public research organisations. However, workforce retention remains a challenge. Global demand for AI expertise is intense, and many top researchers are lost to better-funded roles overseas or in industry.

To develop and retain the research workforce, we must create **clear, supported career pathways**, from PhD through to principal investigator. This requires secure, long-term funding and opportunities for leadership, interdisciplinary collaboration, and public impact. Competitive salaries and international collaboration opportunities are also important to prevent brain drain.

Early-career researchers in AI need mentoring, exposure to applied projects, and platforms for visibility. Industry partnerships and fellowships can help bridge the gap between academia and practice. The AI whitepaper outlines how an AI talent pipeline—from school to postdoc—can be built with national coordination.

To retain research leaders, we must offer more than money. Leaders need autonomy, influence, and the opportunity to build teams around bold, long-term ideas. Many are motivated by the opportunity to create social impact, contribute to national goals, and shape the future of responsible AI.

4. Other Critical System Issues

Several structural issues require attention beyond funding quantity. Chief among them is the **implementation of a national AI strategy**, which the 2024 whitepaper identifies as a critical gap. Without strategic coordination, AI investments will remain piecemeal, and New Zealand risks becoming dependent on imported technologies that may not reflect local values or needs.

Second, the system must be governed by strong **ethical and cultural principles**. As AI becomes more powerful, we must have clear guidelines for transparency, accountability, and inclusion—especially when AI is used in public decision-making. This is not only an ethical issue but one of public trust.

Third, there is a need for **open science and collaboration**. New Zealand can punch above its weight by sharing data, code, and tools, and by building collaborative communities that include Māori researchers, industry practitioners, government agencies, and civil society. In AI, open source approaches often accelerate innovation and allow diverse voices to contribute.

Finally, we must improve **public engagement** in science and technology. AI affects everyone, and research agendas must be shaped with community input. Citizens should have a say in how AI is developed, used, and regulated—especially in areas such as education, health, and justice.