

# Building a just research system together

Aisling Rayne, Hitaua Arahanga-Doyle, Troy Baisden, Bethany Cox, Murray Cox, Catherine Febria, Stephanie Galla, Shaun Hendy, Kirsten Locke, Anna Matheson, Aleksandra Pawlik, Tom Roa, Emma Sharp, Tammy Steeves, Leilani Walker, Krushil Watene, Priscilla Wehi  
Te Pūnaha Matatini Centre of Research Excellence

## Background

The global research system is in crisis. In Aotearoa New Zealand, our institutions are siloed, the research community is overstretched and our system does not effectively support society to respond to urgent challenges like flooding and climate change. **The system isn't broken – it was built this way.** Despite espoused values such as manaakitanga and whanaungatanga, our institutions are designed to promote hyper-competitiveness, individualism and productivism. **This system does not benefit society.** Building a just research system that sustains broader societal participation and collaborative approaches will deliver the knowledge and tools we need to face the global challenges of our time.

When birds flock for flight, they move from an individual state to a highly ordered structure that enables them to move together, aiding their collective journey. We can apply this strategy to the research system in Aotearoa NZ by supporting systematic, collaborative, and whole-of-community action.

## Aim

To build a thriving research system that benefits all of Aotearoa New Zealand, we need transformative whole-system change. We apply complex systems thinking to demonstrate how.

## Key Contributions

- Aotearoa New Zealand can be an international leader in building more just and effective research systems
- The application of complex systems thinking using interdisciplinary approaches can address complex global challenges
- Whole-of-community action is needed to build a people-centred research system

## Findings

The current research system promotes exclusion by rewarding those who practise entrenched norms, including individualism, hyper-competition and productivism, and penalising those who challenge them. These norms underpin the design of scientific institutions and funding mechanisms. For example, hierarchical structures and short-term funding cycles disincentivize participatory and collaborative approaches.

**To build a research system that sustains collaborative knowledge creation, we urgently need to invest in systematic and whole-of-community action.** Fragmented support and incremental change will not solve the current crisis.

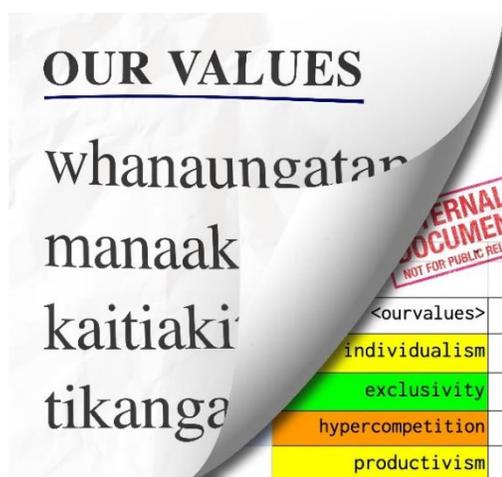


Image: Jo Bailey

This action needs to serve all members of the research community, especially those on the margins, in precarious positions and in support roles – for without its people, there will be no research system at all. Similarly, the opportunities afforded through inter- and trans-disciplinarity are only possible where diverse disciplines exist in the first place, including those in the social sciences and humanities.

What does systematic and whole-of-community action look like? The leading kawau, or shag, extends its neck forward as it flies in a flock, knowing that when it tires another will move forward into its place. To be responsive to the critical challenges of our time, the research community needs to travel forward in a shared and purposeful direction — one that moves us closer to a better, more just society.

**We can learn from other sectors that are already applying complex systems thinking.** In community health, Healthy Families NZ teams have used the Six Conditions of Systems Change (Fig. 1) to make a strategic move away from fragmented, small-scale, and time-limited programmes by supporting existing – and investing in new – local action on health.

We identify five interconnected pathways which show promise for transforming the research system. These pathways together intersect with the multiple conditions required for systems change:

- How we act
- How we lead
- How we resource
- How we evaluate others
- How we evaluate ourselves

**We need to harness the processes of complexity with intent and urgency to build a research system that is prepared to address the complex global challenges in which we all have a stake.**



Figure 1. Adapted from Kania et al. (2018), translated into Māori by Mihaere Kirby (Ngāti Whakaue) for Healthy Families Rotorua

### Key Policy Recommendations

- Research and tertiary education run as a public good rather than for profit.
- New ministry created for research and tertiary education to enable a whole-of-system rebuild.
- Longer-term, high trust funding models to provide consistency, flexibility and support for participatory and collaborative approaches.
- Enable data collection and sustained research on equity in the research system so that policy is evidence-based.

To find out more about this research, please visit: [Nature.com](https://www.nature.com)  
Or contact: Aisling Rayne – [aisling.rayne@cawthron.org.nz](mailto:aisling.rayne@cawthron.org.nz)

Prepared by Te Pūnaha Matatini Centre of Research Excellence  
Adapted with assistance from Suzanne Woodward, PPI



Te Pūnaha Matatini  
Complexity is at our heart