

Building an Intercontinental Research Infrastructure Ecosystem in Health and Life Sciences:

Opportunities for Australia-Europe
Collaboration

White Paper
October 2025

1. Executive summary

This white paper is jointly submitted by the Australian NCRIS [1] Health Group and the European Life Sciences Research Infrastructure (LS RI) Strategy Board to highlight the critical importance of structured, resourced transcontinental collaboration.

Our communities have met three times - in Prato, Italy (2023, 2025) and in Brisbane, Australia (2024) - to develop mutual understanding, identify shared priorities, and confirm joint interest towards structured collaboration. There is now clear momentum, trust, and community commitment to move from dialogue to action. Our shared aim is to build a globally connected RI ecosystem that can respond to emerging challenges in health and life sciences, from data-driven research and artificial intelligence to global health crises and climate-related threats.

The paper outlines clear alignment with the 2025 European Strategy on Research and Technology Infrastructures, the mandate to ESFRI to develop an international collaboration strategy for RIs, and Australia's forthcoming 2026 NCRIS Roadmap. We propose practical steps and dedicated funding instruments to realise the full potential of Australia-Europe RI collaboration.

2. Background

The third Australia-Europe Symposium on Health and LS RIs was recently held in Prato (16-19 September 2025). Once again it brought together leading Australian and European RI representatives to consolidate and elevate their transcontinental collaboration.

The Symposium built on the two previous meetings that brought together Australian and European leadership from health and LS RIs. Key outcomes from the 2023 Prato Symposium and the 2024 Brisbane Symposium included:

- Stronger ties between Australian and European health and LS RIs, with shared commitment to building a global RI ecosystem through deeper collaboration, joint training, and reciprocal partnerships.
- A common understanding of cross-cutting priorities, including research data interoperability, convergence science, translational pathways, and the value of shared metrics and frameworks to demonstrate impact and sustainability.
- Agreed next steps for structured international collaboration, including regular joint meetings, coordination around user access and workforce exchange, and proactive engagement with funders to support long-term strategic alignment.
- Recognition of the policy and diplomacy dimension of RIs, including their potential role in global governance, regulatory support, and science diplomacy.
- Call for action to address barriers to international collaboration, including expanding funding mechanisms and further developing legal frameworks.

This White Paper comes at a pivotal moment, when the new European Strategy for Research and Technology Infrastructures calls for greater international collaboration, interoperability, and the development of AI-ready infrastructure systems. At the same time Australia is engaged in exploratory talks for Horizon Europe association and is revising its long-term RI investment strategy through the NCRIS Roadmap 2026.

[1] The National Collaborative Research Infrastructure Strategy (NCRIS) is a highly collaborative and distinctively Australian program which maximises Australia's NRI investments by coordinating open access, targeted specialities, and co-funding across the country.

3. Commonly identified priorities with potential for transcontinental collaboration

The event reaffirmed shared priorities as listed above and marked a turning point in aligning efforts toward coordinated strategic action and funding. The participants agreed to summarize and share the identified opportunities and challenges for collaboration with their respective funders in this white paper:

Identified opportunities for transcontinental RI collaboration:

- Expanding structured training, exchange, and mobility programs to build a skilled RI workforce
- Supporting innovation pipelines that connect RIs, researchers, and industry across borders
- Making research data FAIR (findable, accessible, interoperable and reusable) across domains and jurisdictions
- Developing, sharing, and applying AI/ML models that deliver data sovereignty while achieving global scale
- Enhancing visibility and understanding of RIs as strategic assets—not just service providers

Identified challenges for transcontinental RI collaboration:

- Limited funding mechanisms for international RI collaboration
- Legal and administrative barriers to joint actions such as reciprocal user access and joint coordination efforts based on common funding
- Underdeveloped recognition of RI professionals and career paths

4. Recommendations

To address these opportunities and challenges, we make the following recommendations:

Establishing an Australia–Europe Health and LS RI Forum

We propose to create a dedicated forum to coordinate collaboration on health and life sciences RI between the two regions. This forum would monitor progress, advise on strategic alignment, and act as a conduit between research infrastructure communities and key funding bodies.

Funding Structured Cooperation Mechanisms

We recommend the implementation of structured mechanisms to support collaboration, such as pilot programs for access and staff exchange, the co-development of joint training modules focused on AI, FAIR data, and research translation, and shared projects for data interoperability and industry engagement. Funding required for these initiatives would be modest in scale but catalytic in impact, unlocking new pathways for sustained cooperation and innovation.

Developing Shared Policy and Legal Tools

We propose the joint development of model agreements and legal instruments to streamline international cooperation and reciprocal user access, and provide the legal foundation for scalable action. These tools should also support engagement with policymakers and increase the visibility of RIs as strategic assets.

Promoting Strategic Case Studies and Mutual Visibility

We advocate for the development and funding of compelling case studies and shared visibility tools that can illustrate the real-world impact of collaboration and reinforce the alignment of Australian and European strategies within Horizon Europe, ESFRI roadmap 2026, and NCRIS Roadmap 2026.

5. Added value of structured international collaboration

Structured collaboration between Australia and Europe in the field of health and LS RIs offers significant added value. It enhances resilience to global health and climate challenges, supports the development of AI systems for health research that are globally scalable yet locally sensitive, and promotes the sharing of skills and expertise needed to build a sustainable and mobile workforce. Moreover, it improves efficiency and drives innovation by enabling shared use of infrastructure and seamless cross-border access to facilities and data. The third Prato symposium reaffirmed not only a set of common scientific priorities but also the deepening trust and operational readiness among RI leaders from both regions.

The momentum is here. What is now needed is joint investment and coordinated implementation. Australian and European funders can reach high leverage by creating strategic funding instruments for international cooperation, and in this context it will be important that the consultations on associating Australia with Horizon Europe also explicitly include the research infrastructure dimension of the framework programme.

Acknowledgements

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Australia's associate membership in the European Molecular Biology Laboratory (EMBL) since 2008 has been an important catalyst for international collaboration between Australian and European researchers and stakeholders in the life sciences. It exemplifies how Australia connects strategically within the broader European research ecosystem.

