

2025 NCRIS Rd 2 Submission

AusRISE: Australia's First Research Infrastructure Fellowship Program

Priority Area: Workforce Development

Successive National Research Infrastructure (NRI) Roadmaps have highlighted the need for research infrastructure (RI) workforce development and the urgency for research and technical specialists who have strong technical, digital and professional skills and are enabled to manage and optimise Australia's cutting-edge technologies and platforms. Despite the clear need, little investment and progress has been made.

AusRISE addresses this critical gap by establishing a structured, scalable framework to attract, train, and retain the next generation of RI specialists, with focus on digital domains. It delivers a national step change in recognising people as a core component of research infrastructure, embedding structured training, mentorship, and leadership development across career stages to build a skilled, future-ready workforce.

The submission proposes to deliver AusRISE as a pilot in health and the life sciences, connecting senior leaders, emerging specialists, and early-career researchers through three integrated streams. Each stream combines structured training, mentoring, and placements, deepening international collaboration and industry engagement and ensuring cross-sector mobility and the acceleration of technology adoption.

- **AusRISE Leaders:** International leadership program for senior RI specialists, fostering knowledge exchange and global connectivity.
- **AusRISE Fellows:** Two-year fellowships for emerging RI scientists or engineers developing novel methods and digital technologies within NCRIS facilities.
- **AusRISE Next Gen:** Two-week annual intensive introducing PhD students to cross-disciplinary RI and digital skills.

Anticipated outcomes and impact:

- Launch Australia's first structured national research infrastructure fellowship program across three career streams.
- Establish shared competency and training frameworks adapted from EMBL ARISE, for national implementation and future expansion.
- Strengthen collaboration between academia, industry, and international partners, fostering innovation and mobility beyond the borders of institutions, disciplines and continents
- Build a sustainable national talent pipeline to underpin Australia's sovereign research capability and long-term infrastructure excellence

Initial partners: Bioplatforms Australia, Australian BioCommons, Microscopy Australia, Phenomics Australia, National Imaging Facility, Therapeutic Innovation Australia, Population Health Research Network, SMART CRC, ZEISS, EMBL, ELIXIR, Euro-BioImaging, BBMRI, RI Capacity.

Participating universities will be established via a national call for expression (EOI) of interests with an anticipated co-funding of \$115k annually. Further industry partners will be invited during the EOI process and recruitment of AusRISE Fellows.

Confirmed funding: \$2,000,000