

Please note: the substantive content of the 2026 NRI Roadmap Survey begins at Question 20 (with prior questions dealing with administrative and other information).

As such all submissions that are published include the responses submitted from Question 20 onwards only.

Q20.

Part 2: Research themes

2.1 NRI comprises the assets, facilities and associated expertise to support leading-edge research and innovation in Australia and is accessible to publicly and privately funded users across Australia and internationally. We are seeking your input on possible directions for future national-level investment - i.e., where the requirements are of such scale and importance that national-level collaboration and coordination are essential.

The [2021 Roadmap](#) used a challenge framework to support NRI planning and investment. With this in mind, consider likely future research trends in the next 5 - 10 years, and with respect to one or more of the 8 challenge areas identified in the 2021 Roadmap as listed below:

- describe emerging research directions and the associated critical research infrastructure requirements that are either not currently available at all, or not at sufficient scale and
- describe current national infrastructure requirements that you anticipate will no longer fit the definition of NRI in 5-10 years.

Do not limit your commentary to NCRIS funded capabilities.

Q21.

Resources Technology and Critical Minerals Processing

Q22.

Food and Beverage

Q23.
Medical Products

Q24.
Defence

Q25.
Recycling and Clean Energy

Q26.
Space

Q27.
Environment and Climate

Q28.
Frontier Technologies and Modern Manufacturing

We need to profoundly expand our expertise in data science and in particular how it integrates with other disciplines. This requires more investment in training our young, data base management, supercomputing and data storage.

Q29.

2.2 The 2024 statement of National Science and Research Priorities (NSRPs) includes outcomes linked to each priority to assist in identifying critical research needed in the next 5 to 10 years.

Consider the priority statements and, with respect to one or more of the 5 priority areas as listed below:

- describe emerging research directions and the associated critical research infrastructure requirements that are either not currently available at all, or
- not at sufficient scale and describe current national infrastructure requirements that you anticipate will no longer fit the definition of NRI in 5-10 years.

Do not limit your commentary to NCRIS funded capabilities, and where relevant, refer to the underpinning outcomes and research identified in the NSRPs document.

Q30.

Transitioning to a net zero future

Q31.

Supporting healthy and thriving communities

There is a growing need to better understand how the environment has impacted health and how we can modify these changes to improve health. This varies with ethnicity (see below) and so in doing this we must not adopt a one size fits all. This area of research will affect most of the non-infectious diseases that captures the interests of the majority of the biomed research community. This also requires BIGGER investment in basic research which is currently under threat. There is almost a view now in Australia that other countries will take care of the basic research but nothing could be further from the truth now as other countries also face a downturn in investment in basic science. This represents a fantastic opportunity for Australia!

Q32.

Elevating Aboriginal and Torres Strait Islanders knowledge systems

As described above we need a marked expansion of our focus in Aboriginal Health as they clearly display vulnerability to a number of non-infectious diseases like diabetes and cardiovascular disease yet we have zero idea why! If we are to make a big step forward in this area we must tackle this and other relevant questions that specifically relate to this ethnic group.

Q33.

Protecting and restoring Australia's environment

When we talk about the environment we do not place sufficient emphasis on the modern food and physical activity environment which is clearly causing a marked decline in the health of Australians. There is little appetite to tackle this because it involves a number of powerful corporate enterprises that have a strangle hold over things like the overall nutritional quality of food. There needs to be an urgent enquiry into this environmental threat.

Q34.

Building a secure and resilient nation

At some point Australia wanted to be known as the knowledge country but this aspiration in my view has been lost to other competing needs. Unlike other resources like minerals which are exhaustible, knowledge will empower and fuel many new industries well into the future often in unpredicted ways.

Q35.

2.3 The case for a new NRI capability, or enhancements to existing capabilities, typically emerges through advocacy from research communities clustering around rigorously identified needs and goals. Such a concept could respond to a requirement for novel or expanded capacity within a domain, or across domains, and must be such that it could only be made available with national-level investment.

If you have identified such a requirement, briefly describe the need, the proposed infrastructure capability, the medium-term goals, impacted research communities, and the timeframe over which you advocate its establishment. Your response can include links to relevant existing reports.

I have emphasised a greater emphasis on basic research in Australia. One area I have observed to be under threat for example is research on model systems like flies, rodents and larger animals. Such research has been at the cornerstone of all major advances in the past but there is a now a view by some that it is no longer necessary. While the pace of discovery has increased over the past two decades we still have a long way to go before we can make a lasting impression on the health of Australians in a truly sustainable way. Now is not the time to abandon investment in the very thing that has got us to where we are today. Sometimes we have to reward curiosity even if the immediate rewards are difficult to see.

Q36.

Part 3: Industry perspectives

This section is seeking input specifically from industry-based respondents. Other respondents can skip this section.

Recommendation 6 of the [2021 Roadmap](#) related to improvements in industry engagement with NRI. To complement work on this topic that has occurred since then, we are seeking additional advice on NRI requirements as perceived by current or potential industry-based users.

Q37.

3.1 Have you (or your organisation) interacted with or used Australia's NRI?

☒ Yes

☐ No

Q38.

3.2 If so, please briefly outline the NRI capabilities you (or your organisation) have interacted with or used. Do not limit your response to NCRIS capabilities.

Q39.

3.3 Please indicate your (one or more) primary reasons for interacting with NRI:

☒ For expertise or advice

- ☒ Access to research resources or products
- ☒ Access to equipment for research
- ☒ Access to equipment for operational reasons
- ☒ Help in translating research
- ☒ Access to data
- ☒ Support for clinical trials
- ☐ Other (please specify)

Q40.

3.4 If you answered no, please indicate your (one or more) primary reasons:

This question was not displayed to the respondent.

Q41.

Part 4: Other comments

4.1 Please elaborate on any of your above responses or add any other comments relevant to the development of the 2026 Roadmap. Your response can include reference or links to existing reports that you recommend be considered during the 2026 Roadmap development process.

Q49.

4.2 Optional Document Attachment.

Note: Our strong preference is that answers are provided against the relevant questions in the survey. However, this file upload option is available for submissions in file format, where needed. Please ensure the document includes your name or organisation.