ARC applications: some tips for writing about research environment

Research Environment has become an important part of ARC applications. Worth 15% of the total score in a Discovery Projects application, your presentation of research environment must:

- Describe the existing, or developing research environment within the Administering Organisation/other Organisation(s) for this Project.
- Outline the adequacy of the Research Environment in your department, school or research group, and the extent to which it will provide opportunities for knowledge growth, innovation, collaboration, mentoring and student training.
- Describe how the Project fits with the Administering Organisation’s research plans and strategies.

Suggested length

Given that the first two points are complementary, you typically can address all the required points in two paragraphs, the first of which is likely to be much longer than the second. Consequently, you should be able to provide a strong response about the research environment in roughly half a page or so.

General principles

Your aim should be to make it crystal clear that your project will be conducted in the ideal research environment in terms of support personnel, facilities, opportunities for collaboration, mentoring etc. If it is not the “ultimate” environment, then demonstrate how your department (and, if relevant, your wider faculty and/or Macquarie as a whole) is particularly suitable for the proposed research.

Members of the ARC College of Experts consistently say that a general description of environment is pointless. For example, an ERA "5" score for your discipline is great, but doesn't provide any clear evidence that the local research environment is ideal for the proposed research.

Don't attempt to give a comprehensive listing of collaborators, equipment and so on. It is more convincing for you to choose, for example, one or two key collaborations and then clearly explain how they will enable your project to succeed. Similarly you could choose one or two pieces of key infrastructure and explain why they are essential to your project.

The more unique and/or recognised those specific collaborators and/or infrastructure are, the better.

Possible areas to cover under research environment

Research environment, at its most basic, comprises the intellectual environment and the available physical environment. Here are some ideas to choose from. Pick the most compelling ones for your current project and then describe specifically and in some detail.

Intellectual environment

- Primarily this environment is local collaborators, mentors and/or advisors. When you name people in those types of roles, you need to make it clear what their expertise is and how it will advance the project.
- Another aspect is any high-profile domestic and/or international networks or collaborations that already exist and will be a resource for the new project.
- You could also include any of Macquarie’s background IP that is essential to the project, especially if that IP (or some of it) has been patented. Again, be specific.
- Students are another intellectual resource; for instance, if the department has consistent access to a high-quality cohort of students each year through its popular MRes program.
Physical environment

Physical environment or research infrastructure could include:

- specific equipment, laboratories and other facilities;
- high-quality (and perhaps dedicated) technical expertise;
- unique databases, samples, corpora, bio-banks, animal or cell lines, animal facilities, etc;
- Macquarie’s museums and so on.

Other aspects of research environment may include any project-specific cash or in-kind resources that are provided at departmental, faculty or central levels.

Remember that the ARC gives a range of possible areas in which you could illustrate how the research environment will advance the project in "knowledge growth, innovation, collaboration, mentoring and student training". Again, choose the strongest opportunities to showcase.

Alignment with the Administering Organisation’s research plans and strategies

Any quality research project will align with Macquarie’s strategic priority of having an accelerating and impactful performance in discovery, so the point here is to be more specific.

Alignment of the project with one or more of Macquarie’s Concentrations of Research Excellence (COREs) is—and will remain—good evidence of strategic alignment. So make sure to explain how your project aligns with a CORE, wherever possible.

Other areas to highlight to demonstrate your alignment could include focussing on high ERA scores and/or on ARC Centres of Excellence, CRCs and Macquarie Centres. Briefly outline the alignment, rather than just claiming that it exists.

Once the Macquarie Research Framework is finalised later this year, there may be opportunities to provide additional specificity to descriptions of how future projects align with other specific areas of Macquarie’s research strategy.