

This document collates the Australian Academy of Science's Early- and Mid-Career Researcher (EMCR¹) Forum's text box response to the survey questions from the National Health and Medical Research Council (NHMRC) draft Good Institutional Practice Guide (the Guide) consultation.

If you would like to provide feedback on Section 1 'Values', please provide details below.

The intellectual freedom and autonomy value may be difficult to implement in practice and have unintended consequences. Although all researchers should be free to express ideas, early- and mid-career researchers (EMCRs) are often appointed to work on a specific project/grant with predefined objectives. This 'freedom' may set an expectation that researchers should be choosing activities in addition to the work they were appointed for and be advancing this in their own time.

Most EMCRs will be applying for their own grants and planning projects beyond their current role, hence adequate training and support are needed to afford them the opportunity to do this. Perhaps this value could additionally state: "senior researchers should allocate time and resources within the EMCR's current role to enable and support EMCRs to explore their own research ideas".

"Mentoring and career development of future generations" could be added as a value. Supporting junior researchers should be spelled out as a core value as this creates an ongoing supportive and successful research culture and would better link to "modelling and leadership" in the following section.

If you would like to provide feedback on Section 2 'Approaches: implementing change to improve institutional research culture', please provide details below.

The case studies are helpful. The framework for how institutions can implement improvements could be helpful but an example of using this framework would be useful such as, how should readiness be assessed, how should change be assessed.

There is too much focus on a top-down model of culture change. The leadership should be encouraged to engage with research and support staff at all levels and co-design solutions that are tailored to their institution.

We suggest that Figure 1 may be more intuitive with progress moving in a clockwise direction.

If you would like to provide feedback on Section 3.1 'Modelling and leadership', please provide details below.

In addition to leadership training, and mentoring, EMCRs should receive high quality training for key research skills including peer-reviewing, grant writing, establishing collaborations, and contributing to high value service activities such as committees. Formalised training would ensure consistency and counteract bad habits that HDR students and EMCRs may otherwise pick up.

The "modelling and leadership" section should stress the importance of listening as a fundamental skill of leadership. The EMCR Forum commends the explicit examples around supporting Aboriginal and Torres Strait Islander researchers and raising awareness of how an inclusive culture benefits everyone.

¹ An EMCR is an individual between 0 and 15 years (0-5 for early career, 5-15 for mid-career) of graduating from a PhD or equivalent (discounting career interruptions) who actively engages in research, either as a researcher or in a role that substantially supports the delivery of research and that requires substantial research training and experience. This includes researchers in academia, industry, government, public, commercial or not-for-profit sectors. Researchers without a higher degree but with equivalent professional experience may identify as EMCR, typically in circumstances of non-traditional career pathways and/or of belonging to underrepresented intersectionalities.

Australia relies on a substantial proportion of culturally and linguistically diverse researchers. Some researchers come from cultures that discourage junior people from voicing their views, especially if they differ from those of their superiors. Training for institutional leaders should include education of the issues and challenges impacting various minorities to help them understand how to create a culture where everyone feels safe to raise concerns and bring their best selves to work.

If you would like to provide feedback on Section 3.2 'Institutional resources to support the conduct of high-quality research', please provide details below.

This section provides useful, specific advice. However, it must be clear that “establishing centrally provided statistical support” and “appointing research quality advisors” are new appointments. These should not be added to the tasks of current researchers without appropriate recognition, recompense and allowance of time in their contracts.

To expand on the suggested activity to “provide internal independent peer review”, a committee could be established to provide internal review of research plans including grant applications. Participation on such committees should be positively recognised in performance appraisals and be regularly reshuffled to allow all researchers the opportunity to participate.

If you would like to provide feedback on Section 3.3 'Education and training about good research practices', please provide details below.

For the below points*, and anywhere in the guide which suggests adding responsibilities to existing staff, it should be specified that appropriate time and support is needed for these roles, and participation in such activities should be recognised in performance appraisals. These administrative roles often fall on EMCRs, especially women. Although they can be useful development opportunities, the time commitment is often not adequately reflected in a person’s contract and in performance reviews. These roles should help with career progression, not take away from research time and hinder progression.

*“Hire people with appropriate qualifications and expertise, or train existing staff, to provide relevant education and training, and assess competence.”

“Establish a staff member whose responsibilities include the administration and coordination of the education and training of researchers.”

If you would like to provide feedback on Section 3.4 'Rewards and recognition', please provide details below.

This section is important to ensure researchers are recognised for more than publications in journals with high impact factors. The example of awards for mentoring, research training and supervision are good, but individuals should also be recognised for their service contribution to the research environment, such as participation in committees and organising conferences.

Focusing on diverse research outputs and contributions as a way of moving away from narrow researcher metrics is progress. However, care is needed to not increase strain on researchers by expecting everyone to become expert at research-adjacent skills such as science communication, policy advice and commercialisation in addition to improving the skills that directly increase the quality of research. The hyper-competitive nature of the research environment combined with increased workload is already a leading cause of burnout for EMCRs. Anecdotally, it is also why researchers with additional responsibilities or barriers, such as caring and cultural responsibilities, and disability, leaving the sector. These are the underrepresented groups that the sector is trying to retain. It is vital that initiatives to improve research outcomes and maximise the translation to society do not create additional strain for researchers. The focus should be on researchers demonstrating collaboration with professionals who possess research-adjacent skills, rather than expecting staff to attain these skills themselves. When creating cultural change, through rewards, promotion or hiring, the message should be clear that what is being recognised is the person’s work to improve research integrity, transparency and workplace culture, not the ability to do the job of many professionals.

If you would like to provide feedback on Section 3.5 'Reporting and addressing research quality issues', please provide details below.

This section is important to ensure that there is a clear and transparent mechanism for reporting and managing research quality issues. Currently, most institutions do not have clear and transparent strategies and procedures for reporting and addressing research quality issues, or existing procedures are not followed appropriately. This risks the safety of whistleblowers and can result in inaction by management following a report. In addition, management of research quality issues are often punitive with insufficient attempts to educate those involved or address the underlying cultural issues. We are pleased that the draft Guide calls out unhealthy competition, publication pressure and power imbalances. Too often, students and EMCRs are the ones who are punished for trying to survive in the prevailing academic culture. Institutional will for cultural change and supportive training opportunities for staff at all levels to ensure research integrity and good research practices is pivotal.

Often roles supporting research integrity are ignored and can even undermine promotion and position applications for researchers. Reporting and managing research integrity and research practice takes time away from the metrics that are often emphasised and valued by promotion/hiring committees, such as grants and papers. The draft Guide states: "Ensure that staff who respond to research quality issues have this role recognised when they apply for positions or promotion". Implementation of this recommendation is key.

If you would like to provide feedback on Section 3.6 'Communication', please provide details below.

We suggest the addition of a self-reflection question on whether institutions have established accessible communication channels to receive feedback or reports on issues of concern, and whether these channels are connected to mechanisms that support people reporting the concerns.

If you would like to provide feedback on Section 3.7 'Monitoring, evaluation and reporting', please provide details below.

Monitoring, evaluation and reporting are critical for the success of cultural change in research institutions. This cannot occur without resources and funding to conduct these activities. Participation and leadership in monitoring/evaluation/reporting of institutional culture should be recognised and rewarded by hiring, tenure and promotion committees.

The desire for positive change at the institutional level is foundational to cultural change. However, the EMCR Forum supports the establishment of an external Office of Research Integrity to oversee institutions as this is a failsafe to ensure progress and resolutions when self-regulation is insufficient.

If you would like to provide any general comments on the draft Guide as a whole, please provide details below.

Some big questions are: How will NHMRC ensure that institutions adhere to and implement these recommendations? Where will the funding required for implementing the recommendations of the Guide come from?

It is unclear why the NHMRC have decided that research misconduct, integrity and bullying are not within the scope of the Guide. Good institutional practice should encompass these matters as they also stem from work culture. The EMCR Forum's views on research misconduct are expressed here: <https://futurecampus.com.au/2023/09/20/research-misconduct-linked-to-bullying-emcrs/>

Whilst resources such as statistical support and internal peer review are important, institutions should ensure that additional tasks are not assigned to researchers without appropriate recognition, recompense, support and time. Participation and leadership in these tasks should contribute to professional development and not hinder career progression.

The links for further resources are excellent. The self-reflection questions are helpful in assisting institutions and research groups to reflect on their own practices.

Overall, the cultural changes and values outlined in the Guide are both needed and appropriate. However, the Guide focuses on institutional leadership and does not provide sufficient recommendation around empowering EMCRs, who are Australia's future leaders. We believe that leadership at all levels is necessary for long-term, sustainable change. The below survey from University of Melbourne ECA Network, Monash University and Research Australia of EMCR

culture and wellbeing from across 18 Universities around Australia may be useful: <https://mdhs.unimelb.edu.au/early-career-academic-network/resources/mdhs-eca-network-resources/landscape-for-emerging-academic-leaders>.

The findings from that survey led to several core recommendations for change within institutes, including:

1. Promote career stability for academics where possible (e.g. via longer-term or continuous contracts)
2. Enable and strengthen positive supervisory practices, developing the work environment and our future leaders
3. Fairness, consistency and transparency in workload models and promotion processes
4. Generate regular and consistent data relating to EMCRs

Greater emphasis on these points and the role of EMCRs in enacting this change should be included in the Guide.

Prepared on behalf of the EMCR Forum by the Executive team. The EMCR Forum represents over 6,000 of Australia's early- to mid-career researchers across science, technology, engineering, mathematics and medicine, and thus offers a unique perspective from the future leaders of STEM research across Australia.

To discuss or clarify any aspect of this submission, please contact Dr Mari Kondo, Manager - EMCR Policy and Programs at emcr@science.org.au