



Australian Academy of Science

SUBMISSION TO THE

**NHMRC CONSULTATION ON THE
DRAFT AUSTRALIAN CODE OF
CONDUCT FOR THE RESPONSIBLE
CONDUCT OF RESEARCH**

BY THE AUSTRALIAN ACADEMY OF SCIENCE/ FEBRUARY 2017



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Australian Academy of Science submission on the Australian Code for Responsible Conduct of Research and accompanying Guide to investigating breaches.

Preamble to the response.

The Academy welcomes the opportunity to comment on the *Australian code for responsible conduct of research* (the Code) and the accompanying guide to investigating breaches (the Guide). The redevelopment of the Code is timely and necessary.

The Academy holds that, while the vast majority of Australian researchers and research organisations undertake their work with integrity and in accordance with the existing Code of Conduct, there will inevitably be a small number of breaches – both deliberate and inadvertent – and that organisations and funding bodies should therefore operate on the assumption that breaches of the Code will occur and will need to be dealt with. Failure to anticipate such instances means that approaches to dealing with them are at risk of being unfocussed, *ad hoc* and uncertain, leading to poor case handling. *Poorly handled* breaches cause reputational damage and undermine confidence in institutions, research, science and academia. *Well-handled* breaches are a net win for an institution, as it will be seen to be responding appropriately to potential and actual misconduct. Correct handling of a breach will also see the scientific record repaired.

It is in everyone's interest to have clear and transparent mechanisms for addressing breaches of the Code.

Neither the existing nor the proposed Code is a legal document. Like its predecessor, the new Code is a voluntary code of conduct to be entered into by researchers and research institutions. However, there will be contractual obligations towards the Code by institutions in receipt of ARC or NHMRC funding: in this way, as previously, the research councils will leverage the funding of research to promote compliance with the Code.

The Academy notes that the draft Code and the draft Guide both assume the centrality of research funded by the research councils and performed at universities. This has the effect of prioritising financial sanctions for breaches, specifically the withdrawal of grant funding or reduced access to funding. However, there are cases where financial sanctions are not appropriate; these are beyond the scope of the research councils' approach, and responsibility will rest with individual institutions.

As the Code is a creation of Universities Australia and the research councils, it is not clear how it would affect researchers not at such institutions or who are not in receipt of research council funding. For example, it is not clear how CSIRO, the Bureau of Meteorology, the Australian Nuclear Science and Technology Organisation, the Defence Science and Technology Group and other publicly funded research organisations (PFRAs) would be bound by the Code, if at all. The Code would not seem to apply at all to industrial or commercial research, save where such research is co-funded by a research council.

PFRAs will obviously have internal processes, but these processes potentially have the same shortcomings as internal processes of universities, with the same risks of conflicts of interest and of silencing vulnerable voices. If there is a perception that agencies such as CSIRO are somehow exempt from the Code, this will be damaging, both to the reputation of the organisation and to the moral authority of the Code.



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It is therefore important for PFRAs and other organisations to have a mechanism by which they can formally agree to adopt and abide by the Code. For full effectiveness, the Code will need to be adopted and formalised by research organisations outside of the research councils' immediate reach, including PFRAs. An example of this would be aligning institutional employment agreements with the requirements and principles of the new Code.

On the matter of research integrity, it should be noted that there are two separate and distinct aspects of research integrity that do not have a simple correspondence. The first is the integrity of the academic record: published academic information should be as clear and accurate as possible. Breaches in the integrity of the academic record – errors in the research literature – may arise from accident, poor research practice, or deliberate misconduct. Identifying and correcting such errors should be encouraged; it may be that a willingness to correct the academic record would count as a mediating factor in penalties for research misconduct. Moreover, any and all researchers should be encouraged and rewarded for correcting errors in the academic record.

The second is the personal integrity of researchers. Researchers should conduct themselves according to the relevant Codes of Conduct, and should be sanctioned for breaches – even if the breach does not appear to affect the integrity of the academic record.

These two aspects are clearly interrelated, but should not be conflated. The Code of Conduct should concern the latter case, while being aware of the former.

Q1: Do you like the new approach to the Code, namely the principles-based document being supported by several guides that provide advice on implementation?

The Academy strongly supports the approach of the proposed revisions to move away from being a highly prescriptive document to one which is principles based with considerable flexibility as to how the code will be implemented across Australia. A “principles-based” Code with guides to interpretation is more flexible and thus more broadly applicable than a process-based Code.

Nevertheless, the recommended processes must be useful and applicable. A principles-based Code without structures to support it is merely aspirational. Relying on principle alone does not consider the action of other incentives that may work against research integrity: protection of reputation, for example, or securing financial rewards. The guides will be useful, but do not take the place of formal mechanisms for addressing research misconduct.

The research councils consider that maintaining research integrity is a matter for individual institutions and individual researchers. While this is ultimately true, if this were sufficient there would be no need of a national code of conduct. If the Code is to be instituted on a national level – an endeavour that the Academy whole-heartedly endorses – then there should be national-level mechanisms to support it.

Q2: The draft Code is intended to be used by all research disciplines. Do the principles adequately capture the expectations for responsible research across all research disciplines?

The Academy is satisfied that the principles capture the expectations for responsible research across a large range of disciplines, and are suitable to their purpose. It should be noted that these principles should equally apply to research conducted at publicly funded research agencies.



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Consideration should be given to including the formal roles and responsibilities of those in supervisory positions in the Code, to reflect the central nature of the training and mentoring relationship in academia.

See below for issues regarding the text of the documents.

Q3: The draft Guide refers to breaches of the Code rather than providing a definition of research misconduct, and states that institutions can decide whether or not to use the term research misconduct in their own processes. Is this guidance clear and implementable? What issues do you foresee with that approach?

There needs to be an agreed definition of misconduct. The Academy recommends “a deliberate breach, or persistent breaches of the Code”, which we understand is consistent with the recommendation of the Australian Academy of Health and Medical Sciences. The current approach leaves a void; every institution will be forced to develop or adopt its own definition of “misconduct”, leading to inconsistencies and confusion.

It has been suggested that one problem with the current Code may not be the presence of a definition, but the lack of a clear and consistent one.

Q4: Do you think the process described for investigating and managing potential breaches of the Code is clearly described and practical?

The proposed process relies on self-regulation by institutions. However within such a system there are potential gaps which need oversight including transparency, mechanisms for appeal, expertise in investigation and independent avenues to investigate potential breaches of the code.

The draft Code encourages institutions to resolve investigations into breaches internally. As noted in the FAQ (page 4, FAQ 20), this will in some cases present a potential conflict of interest. For issues of serious misconduct, the Academy recommends that other mechanisms should also be available, such as independent review by an external investigatory panel or another independent review mechanism.

While the Academy recognises the value of a self-regulation process, it does note that Institutional Offices of Research Integrity, as recommended in section 4.3.2 of the guide, are not independent; they operate within the context of their host institution. An independent avenue for complaints may provide a greater assurance of independence for complainants who believe they will be made vulnerable by making a complaint – for example, junior staff, technical staff, research students etc.

In terms of thresholds for such alternative mechanisms, the Academy recommends that a reported incident of misconduct should require independent investigation if it has the potential to lead to dismissal of a researcher, return of funds to a government or other funding agency, retraction of a publication, or withdrawal of a degree. If alternative mechanisms were available, it would be important to provide clear guidance on what could be handled internally and what must be handled independently.

The Academy also notes that internal investigation fails to consider cross-institutional research within Australia and funding by non-government agencies. If a matter of serious misconduct arises within a cross-institutional project for instance, there is no clear avenue for resolution unless the



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researchers had the foresight to prepare one prior to the project's commencement. The guide's advice is inadequate, referring only to the mechanisms of investigations being determined on a "case-by-case basis", presumably as an issue of potential misconduct arises. The FAQ states that members of all institutions involved should be consulted about panel composition at the commencement of an investigation (Page 5, FAQ 27). This is too late: consultation and agreement on panel composition must occur before the commencement of any investigation, and preferably at the commencement of the project as part of the governance arrangements.

Independent investigation panels or other mechanisms to ensure independence of process would allay a number of potential issues with the process described by the draft Code and the guide:

- They would be seen to be independent of the host institution.
- With training, they would allow greater consistency in application of the Code of Conduct, without sacrificing the flexibility offered by the new approach.
- They would absolve universities of conflicts of interest when investigating major breaches, and other threats to the reputation of the host institution.
- They would provide an avenue for appeals without recourse to law courts.

For panel investigations (internal or independent) to be effective there must be a sufficiently large pool of people available with expertise in investigating claims of research misconduct. Small institutions may struggle to provide sufficient expertise internally. The NHMRC and ARC should compose and maintain a list of experienced, qualified, potential panel members as described above to facilitate investigations by institutions. There could be a requirement in a deed of agreement that an institution receiving funds from the ARC or NHMRC to nominate a number of potential investigatory panel members. The panel members should receive standard training provided by the research councils, and should be provided with opportunities for peer learning and discussion.

Research integrity advisors should also receive training, and should also be provided with opportunities for advisors to meet with each other to discuss issues and provide mutual support.

There must be also a process for appeal. The current appeals process involving the Australian Research Integrity Commission (ARIC) does not address matters of fact or record, only of process. In the event of a mishandled investigation, the lack of an appeals process may leave affected parties with little recourse beyond legal action. There is an argument to suggest that the role of ARIC should be reviewed such that it had the ability to review decisions and handle appeals.

Because the social consequences of an accusation of research misconduct are immense, institutions should provide support those found to be in (non-criminal) breach of the Code; a "path to redemption" should be identified and promoted. The respondent should have access to a research integrity advisor as a matter of course. Similarly, complaints of ethical breaches are not made lightly and may represent a serious burden on the complainant, especially in cases where there is an imbalance in influence or authority. It should be made explicit in the Guide that the complainant may need support. Access to a research integrity advisor should be provided to the complainant as a matter of course.

Procedural fairness is important; it should be acknowledged that the complainant is as entitled to procedural fairness as the respondent.

The Academy would be interested in more fully exploring the consideration of foreign models for handling research misconduct. The Academy is aware of many countries with offices of research



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integrity or equivalent bodies. The FAQ mentions that many of these models have been considered (Page 1, FAQ 2), but it is not clear what factors the research councils consider to be specific to the Australian context and what factors have been dismissed. (See also response to Q6.)

Q5: The Code Review Committee and working group are considering what additional resources should be developed to support implementation of the Code and Guide. Do you think that case studies would assist you to investigate and manage potential breaches of the Code in accordance with the Guide?

Case studies would most certainly be useful. Further, however, the Academy would recommend a full suite of training materials for panel members and Research Integrity Advisors as a high priority.

There should also be a suite of training materials in the application of the Code for research students.

Q6: Are the mechanisms for review of an investigation clearly and correctly described in Section 7.6 of the Guide? If not, where are the inaccuracies?

Breaches of the code of conduct are a matter of professional, academic and scientific standards. Investigations into breaches may not be compatible with legal processes. While recourse to courts is an appropriate response to matters of breaches of law, the courts may not be able to address breaches of the Code if there is no relevant law. Section 7.6 provides three processes, presumably in sequence: an internal investigation into a potential breach, a technical review by ARIC that considers only the conduct of the internal investigation, and a possible higher authority, such as the courts. The described process does not offer a great deal of scope for appeal or review of a complaint.

Beyond the above, it is not clear how the Code of Conduct will interact with the legal system. The Code of Conduct is not a legal instrument; breaches will not be a matter of law. Without appropriate mechanisms to address breaches of the Code, inappropriate mechanisms (libel law, public commentary, abuse and intimidation) will be favoured.

Although beyond the scope of the consultation, the Academy recommends that an independent office of research integrity, or a similar role such as an expanded remit for ARIC or a research integrity ombudsman, should be given due consideration. Such an office would meet a number of gaps in the described process – most importantly, providing an independent avenue for complaints and issues to be raised, and an independent avenue for appeals. The consideration given should include an examination of the extent and impact of research misconduct in Australia, in order to ensure that the response is proportionate. Ideally, this role would be carried out and properly resourced independent of the research councils, in order to separate the issues of research integrity and research funding.



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Q7: NHMRC, ARC and UA are considering the development of additional guides to support implementation of the Code. The next two guides will likely focus on authorship and data management. The possible topics for additional guidance are supervision, conflicts of interest, peer review, collaborative research, intellectual property and copyright, the role of research integrity advisors, the role of research integrity offices, strategies to encourage compliance or clinical trials. All of these are currently covered in varying amounts of detail in the current Part A of the Code and in other material. Please comment on which three topics you would nominate as being the highest priority and why.

The Academy rates the following as high priorities:

- Collaborative research—The present documents do not provide a great deal of information about investigating potential research misconduct in a collaborative research environment. There are a number of models for collaboration, each with different potential implications for research integrity.
- Supervision and supervisory responsibility—The training and mentoring role is a central one in academic disciplines, to the point that the formal roles and responsibilities of those in supervisory roles should be considered for inclusion in the Code. As well as research training, research integrity should be modelled and taught.

However, the following will be of most use in developing procedures to support the code:

- Roles of research integrity advisors and research integrity offices
- Identifying and managing conflicts of interest.

Otherwise, individual institutions are best placed to say what guidance is necessary.

The Academy strongly recommends that ARC and NHMRC processes and procedures be developed in parallel and that they be entirely consistent.

Other issues on the consultation documents:

The responsibility R14 refers to principles espoused by the NHMRC *National statement on ethical conduct in human research*. This document defines these terms clearly, in the context that they are to be interpreted in the Code, and as such should be referenced.

Similarly, the responsibility R16 refers to the “3Rs (Replacement, Reduction and Refinement)”. This is a long-held principle which is directly referred to in the *Australian code for the care and use of animals for scientific purposes*; if the intent is to evoke this document then it should be referenced.

In general, if the Code relies on existing documents for interpretation then those documents should be referenced. If not, the Code should be made self-contained.

There are assumptions that are presented in the FAQ document that are not necessarily supported in the Code or the Guide. For example, FAQ 9 (page 2) states that the Code does not refer to reproducibility of research but that “many of the principles and responsibilities go toward increasing reproducibility in research.” This may be intended, but as currently drafted reproducibility in research is not an explicit responsibility under the Code.



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Similarly, FAQ 26 (page 5) states that institutions should be transparent about the factors considered when deciding on the composition of a panel. If this is an expectation of an institution then it should be in the Guide.

FAQ 12 (page 3) suggests a reliance on the fact that current institutional processes are heavily influenced on the current Code. This is likely to be the case. However, this will not necessarily continue to be the case when the new Code is implemented; it is reasonable to expect that institutional practices will adapt to the new Code fairly rapidly.

It is recommended that, as much as possible, any assumption in the FAQs that may have consequences on the interpretation of the Code or Guide should be made explicit in the Code or Guide; the FAQ is a supporting document for the consultation, and will not necessarily be considered when the Code and Guide are adopted.