



Submission to the National Health and Medical Research Council

Australian Academy of Science response to the NHMRC Draft Principles of Peer Review

The Australian Academy of Science welcomes the opportunity to comment on the NHMRC Draft Principles of Peer Review.

Each year over \$800 million is invested by the Australian Government in health and medical research, for the most part through NHMRC. The NHMRC, on behalf of the government, researchers, and research institutions, has a responsibility to ensure that this investment is made wisely. The peer review process for new grant applications is the primary means of assessing quality in a fair and transparent manner, so that research investment is in high quality research.

The peer review process is central to all aspects of research: the assessment of grants, reviewing publication outputs from research, and the review of the performance of researchers and research teams. This process is the best available way to ensure that new ideas are encouraged and supported, and outcomes of research are thoroughly put to the test by our peers, ensuring that high quality standards are maintained. However the peer review system relies on researchers having the confidence that the processes used to assess their work are both fair and transparent. Therefore the Academy broadly supports the release of the draft Principles. These Principles will help to provide guidance to both peer reviewers and to grant applicants on how the credibility of the peer review system is being maintained. In general, we agree with both the procedures and the tone of the Draft Principles.

Conflict of interest rules

The number of grant applications received by the NHMRC continues to rise each year. Between 2007 and 2011 project grant applications rose from 2420 to 3369 per year, an additional 949 applications per year. The increase in applications dictates that there has also been a corresponding increase in the number of peer review participants. Both the increasing number of applicants and the increasing number of peer reviewers, combined with the application of the conflict of interest rules, has meant that it is becoming increasingly difficult to find appropriate reviewers of research grant proposals. While ensuring that conflicts of interest do not exist that could lead to bias in review, there is a danger that the conflict of interest rules can be applied in a mechanical way that rules out reviewers with deep expertise, even though they are not conflicted. If this happens, reviewers lacking specific expertise in the subject area of grant applications may be used, particularly for specialised or newly emerging fields of research, to the detriment of the applicant.

Consideration should be given as to whether the current conflict of interest rules might be overstepping their intended purpose, and in doing so unnecessarily reducing the number of expert peer review participants, particularly in those small specialist areas where it is very difficult to find any researchers that do not have some form of existing relationship to others in their field.

For these reasons it might be useful to expand within the Principles on how the Chairs of panels are to manage conflicts of interest, and to provide further details on whether past collaboration or common employment relationships (such as working in the same institution, which may be a University with many Departments and Institutes) should necessarily preclude somebody from taking part in the peer review process. In general an assumption should be made that researchers can be trusted to assess applications on their merit, and conflict of interest rules should only be applied where the peer review participants feel they cannot be impartial, or where they stand to gain materially from the success of the proposal.

Reducing the burden of peer review

The increasing number of grant applications being submitted to the NHMRC is now placing significant pressure on researchers in terms of the amount of time they devote to peer review activities. The Academy recognises that the peer review process is a necessary and vital function that ensures funds are only expended on high quality research. However, the increasing number of grant applications, the majority of which inevitably go unfunded, has resulted in researchers spending more time reviewing applications and inevitably less time undertaking research, resulting in a productivity loss.

Widening the pool of available peer review participants through better managing conflict of interest rules (see above) will to some extent alleviate this problem. However, now might be an appropriate time for the NHMRC and others to explore the benefits of moving towards longer duration grants in an effort to reduce the burden the peer review process places on researchers. Such a move might result in grant applicants needing to put forward new research proposals on a less frequent basis, and thereby reducing the number of peer review requests.