



## ARC Discovery Program Consultation Paper Response Pro-forma

The ARC Discovery Program Consultation Paper is available at [www.arc.gov.au](http://www.arc.gov.au)

Responses to the Consultation Paper should be submitted electronically, using this pro-forma, to the ARC by **COB Wednesday 1 December 2010**.

Email: [DiscoveryConsultation@arc.gov.au](mailto:DiscoveryConsultation@arc.gov.au)

If you have any questions about the Consultation Paper, please contact:

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### Respondent Survey

Information gathered using this survey will enable the ARC to analyse feedback received by type of respondent. Any reporting of respondent information will be aggregated and will not be used to identify individual respondents. **Completion of the Respondent Survey (pages 1 & 2) is optional.**

#### Contact Details of Respondent

Title:	<b>Professor</b>
Name:	<b>Robert Williamson, AO, FAA, FRS</b>
Organisation:	<b>Australian Academy of Science</b>
Contact email address:	<a href="mailto:r.williamson@unimelb.edu.au">r.williamson@unimelb.edu.au</a>

#### Is this an individual response or a response on behalf of an institution?

(Please mark with an X in the box to the right of the appropriate option)

Individual response	<input type="checkbox"/>
Institutional response	<input checked="" type="checkbox"/>

If this is an institutional response please proceed to the feedback section.

If this is an individual response please complete the individual respondent information before continuing to the feedback section.

## Individual respondent information

(Please mark with an X in the box to the right of the appropriate option)

### Age

<30	
31-40	
41-50	
51-60	
61-70	
>70	

### Gender

Male	
Female	

### Current role

Research-only Academic	
Teaching and Research Academic	
Research Administrator	
Other (please specify below)	

### Academic status

Postgraduate Student	
Postdoctoral Research Associate or Fellow	
Assistant/Associate Professor	
Full Professor	
Professor Emeritus	
Other (please specify below)	

### Years since the award of PhD or equivalent qualification

0-5 years	
6-10 years	
11-15 years	
16-20 years	
>20 years	
N/A	

## A new ECR award in the Discovery Program

### Issues for specific feedback

1. Is the definition of ‘early-career’ as researchers who have between 0 and 5 years research experience since the award of their PhD (or equivalent research qualification or experience) appropriate?

Response:

It seems appropriate for most researchers, those who pursue research immediately following award of a PhD. However, while allowance has been made for those who may have had significant disruption (such as having children, carer responsibilities or other career interruptions), only a further 2 years is allowed, making 7 years the limit from award of PhD. This is not as generous as some overseas research agencies: for instance, the NIH offers a wider window by defining “new investigator” [equivalent to ECR] as ‘within 10 years of completing his/her terminal research degree or medical residency’.

2. Will the proposed new ECR award meet the needs of ECRs?

Response:

The proposed ECR award will meet some of the needs of Australia’s ECR community, and is certainly an improvement on the present situation. For example, three year salary support is a very welcome initiative. The Academy also welcomes plans to streamline the application process and assessment, ensuring that new awards complement other ARC Fellowship schemes. Good links between ECR grants and other schemes will help provide career continuity. The flexible provisions of the scheme are also welcome, as they could accommodate maternity and carer responsibilities.

However, unless there is opportunity for renewal of the grant, the award (only 3 years) seems somewhat limited in terms of career development in many fields, where it takes time to establish a research team. There is also concern whether the total number of ECR awards will be adequate, given the increasing number of PhD graduates.

3. How do we maximise international and national mobility in designing this scheme?

Response:

It is unclear if the award has to be used wholly in Australia, although it appears that researchers who are not Australian citizens can apply. If we adopt the view that Australia should attract ‘the best and brightest’, then it would be appropriate for non Australians to be attracted to the awards. However, this needs to be balanced against the reduction in opportunities for Australian PhD graduates. The Academy would propose that maximum flexibility should be encouraged: there will be some applicants

who wish to pursue part of their career development award overseas, which should be possible, while others will be carrying out research entirely in Australia, but perhaps at more than one institution (or even in different kinds of institutions, such as combining a University role with CSIRO or industry). Even at this early career stage, it is important that superannuation / pension entitlements and rights are both transferrable at minimal cost and able to be preserved.

4. Is \$25,000 per annum an appropriate amount for additional project support (noting if more was offered fewer awards could be funded)?

Response:

The Academy welcomes the provision of “as of right” funding for project support, which will provide an important component of necessary independence for the early career researcher, and may encourage and act as a template for other organisations (such as Universities) that support ECRs. However, we are concerned that some areas of research (such as biomedical research involving animal experiments, research involving field trials, or high energy physics research involving expensive laboratory hardware) could involve project support costs considerably higher than the maximum \$25,000. In these circumstances awardees would have to rely on other sources of funding. The Academy supports the principle that a grant such as this should provide for the full costs of research (salary and project costs).

5. Are the selection criteria appropriate?

Response:

The selection criteria of 50% for the project and 20% for research record would seem appropriate, although there may be difficulties in assessing different areas of research, which by their nature lead to a significantly lower publication output. (The Consultation Paper notes ‘the difficulty of assessing the research track record of researchers with very different levels of experience’.) However, 30% for institutional commitment seems high, unless it is linked to the provision of real funding and resources, rather than “just words”. Thought also needs to be given on how to facilitate interdisciplinary research, which is often not assessed well in competitive grants schemes.

6. Should there be limitations on the number of times an applicant may apply?

Response:

While the number of applications should not be unlimited, more detailed feedback to unsuccessful applicants would be welcome. The 5 year period will be self limiting, in that if an award has not been gained after 2-3 years, potential recipients may be less likely to apply.

7. Given that some of the current cohort of potential applicants for ARF/QEII Fellowships may apply to the new ECR award but those seeking a second ARF/QEII Fellowship will need to apply to the *Future Fellowships* scheme, should the current restriction on ARF/QEII applying for *Future Fellowships* be relaxed?

Response:

In general, the Academy supports maximum flexibility, at least while the system is “bedding down”. The peer review committees should be instructed as to the intention of each scheme. In this case, it should be clear it is seen as an early career award for “high fliers” in all fields with respect to experience, and not for more senior applicants.

8. Are the proposed flexible arrangements adequate?

Response:

The Academy welcomes the flexible arrangements. Our views were set out in our policy statement in mid 2010. We take seriously the need to ensure that our systems welcome and protect the interests of every group of Australian scientists.

In this context, it is essential to maximize participation by women, and by scientists who trained in other countries, in our scientific workforce. The 2009 report prepared for the Federation of Australian Scientific and Technological Societies (FASTS), *Women in Science: Maximising Productivity, Diversity and Innovation*, documented the high levels of attrition in the post doctoral phase of women’s scientific careers and the small number of women in leadership positions in the science and technology sectors. It also highlighted the costs of our failure to provide proper encouragement of ALL early career scientists, and in particular women, in terms of international competitiveness and return on educational investment.

Career flexibility is a major issue in relation to child bearing and rearing for women and, increasingly, for men. There is a need for increased availability of quality childcare and appropriate leave arrangements that support career re-entry for promising young scientists who experience discontinuity for this or other compelling reasons.

### **Issues for general feedback**

The ARC also welcomes feedback on any other aspect of proposed new arrangements to support early-career researchers.

Response:

The Academy of Science hopes that the ARC will attempt to ensure that all of those who win ECR Fellowships (whether through this scheme or other schemes) will be mentored, trained and prepared for leadership roles. We note that often the scientific training that is offered to early career researchers is excellent, but we fail to ensure that they are given skills training and mentored for success as they progress through their careers. While this is in large measure the responsibility of employers, the Academy argues that the ARC (and NHMRC) could take more responsibility to ensure that mentoring occurs and is effective.

## **A targeted and simplified *Discovery Projects* scheme**

### Issues for specific feedback

1. Are the weightings of the selection criteria appropriate?

Response:

No comment

2. How might we simplify the application process further?

Response:

No comment

3. Are there any issues about eligibility we should address?

Response:

No comment

4. Is the rejoinder process useful?

Response:

No comment

5. Do you have comments on the current eligibility criteria for *Discovery Projects* CIs, in particular, and the provisions for researchers holding 50% appointments at Eligible Organisations?

Response:

No comment

6. How might we improve feedback to unsuccessful applicants?

Response:

No comment

**Issues for general feedback**

The ARC also welcomes feedback on any other aspect of proposed new arrangements for the *Discovery Projects* scheme.

Response:

No comment