ARC Presentation to Federation University

17 April 2015

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ARC Executive Director
Overview

1. Funding context
2. Scheme Updates
3. Early career and DECRA data
4. Discovery Schemes data
5. Assessment and selection processes
6. Questions? Discussion
2014–15 Federal Budget
(Approx. AU$415 Billion)
Australian Government support for science, research and innovation shown in red

2014–15 Federal Budget

(Treasury omitted)
NHMRC funding vs population (log scales)

Web: arc.gov.au  |  Email: Communications@arc.gov.au
Aims of the Discovery and Linkage Programs

1. Discovery Program

- Fund excellent, internationally competitive research by individuals and teams that will produce high quality outcomes
- Build Australia’s research capacity through supporting and facilitating research training and career opportunities for excellent Australian and international researchers
- Support research in priority areas that will deliver national benefits
- Enhance research capacity and outcomes through support for international collaboration
Discovery Projects scheme

- DP is the largest scheme, supporting excellent basic and applied research by individuals and teams
- Success rate typically 18–20% in recent years
- Selection criteria (more detail on each in Funding Rules):
  - Investigator (40%)
  - Project Quality and Innovation (25%)
  - Feasibility and Benefit (20%)
  - Research Environment (15%)
- Funding up to five years, up to $500 000 per year
- No salaries for CIs/PIs
I am considering applying for a four or five year Discovery Project grant. What are the main attributes of such proposals?

Applicants should explain why the research is of such nature, scale and scope as to require four or five years, as applicable. Typically longer grants would involve phased or staged research, as an integral part of the research plan. The duration must be fully explained in the Project Description and Budget Justification sections of the Proposal form.
Aims of the Discovery and Linkage Programs

2. Linkage Program

- The ARC's Linkage funding schemes aim to encourage and extend cooperative approaches to research and improve the use of research outcomes by strengthening links within Australia’s innovation system and with innovation systems internationally.
- Linkage promotes national and international research partnerships between researchers and business, industry, community organisations and other publicly funded research agencies.
- By supporting the development of partnerships, the ARC encourages the transfer of skills, knowledge and ideas as a basis for securing commercial and other benefits of research.
- The main Linkage schemes are: Linkage Projects; Linkage Infrastructure, Equipment and Facilities (LIEF); ARC Centres of Excellence; and Special Research Initiatives.
LP Linkages

2011–14

Higher Education
Government
Commercial
Non-profit/other
LP Linkages

Vic

2011–14

Higher Education
Government
Industry/business
Non-profit/other
Number of ECR researchers on proposals received (DP and DECRA)
Number of ECR researchers on proposals received (DP and DECRA)
Proportion of ECR researchers on proposals received (DP and DECRA)
# Gender—DE2015

<table>
<thead>
<tr>
<th>Panel</th>
<th>Number of female candidates</th>
<th>Number of approved female candidates</th>
<th>Female success rate</th>
<th>Number of male candidates</th>
<th>Number of approved male candidates</th>
<th>Male success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSB</td>
<td>149</td>
<td>18</td>
<td>12%</td>
<td>168</td>
<td>27</td>
<td>16%</td>
</tr>
<tr>
<td>EMI</td>
<td>54</td>
<td>9</td>
<td>17%</td>
<td>333</td>
<td>46</td>
<td>14%</td>
</tr>
<tr>
<td>HCA</td>
<td>92</td>
<td>16</td>
<td>17%</td>
<td>83</td>
<td>9</td>
<td>11%</td>
</tr>
<tr>
<td>PCE</td>
<td>64</td>
<td>10</td>
<td>16%</td>
<td>175</td>
<td>24</td>
<td>14%</td>
</tr>
<tr>
<td>SBE</td>
<td>136</td>
<td>20</td>
<td>15%</td>
<td>133</td>
<td>18</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>495</strong></td>
<td><strong>73</strong></td>
<td><strong>15%</strong></td>
<td><strong>892</strong></td>
<td><strong>124</strong></td>
<td><strong>14%</strong></td>
</tr>
</tbody>
</table>
## Citizenship and residency—DE2015

<table>
<thead>
<tr>
<th>Citizenship/residency status</th>
<th>Proposals considered</th>
<th>% of proposals considered</th>
<th>Proposals approved</th>
<th>Success rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Nationals</td>
<td>466</td>
<td>33.4%</td>
<td>83</td>
<td>17.8%</td>
</tr>
<tr>
<td>Resident Australians</td>
<td>863</td>
<td>61.9%</td>
<td>106</td>
<td>12.3%</td>
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<tr>
<td>Returning Australians</td>
<td>65</td>
<td>4.7%</td>
<td>11</td>
<td>16.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1394</strong></td>
<td><strong>100.0%</strong></td>
<td><strong>200</strong></td>
<td><strong>14.3%</strong></td>
</tr>
</tbody>
</table>
# Years since PhD—DE2015

<table>
<thead>
<tr>
<th>Years since award of PhD</th>
<th>No. of considered proposals</th>
<th>% of considered proposals</th>
<th>No. of approved proposals</th>
<th>% of approved proposals</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>157</td>
<td>11.30%</td>
<td>19</td>
<td>9.50%</td>
</tr>
<tr>
<td>1-2</td>
<td>158</td>
<td>11.30%</td>
<td>18</td>
<td>9.00%</td>
</tr>
<tr>
<td>2-3</td>
<td>235</td>
<td>16.90%</td>
<td>26</td>
<td>13.00%</td>
</tr>
<tr>
<td>3-4</td>
<td>287</td>
<td>20.60%</td>
<td>48</td>
<td>24.00%</td>
</tr>
<tr>
<td>4-5</td>
<td>406</td>
<td>29.10%</td>
<td>66</td>
<td>33.00%</td>
</tr>
<tr>
<td>5-6</td>
<td>106</td>
<td>7.60%</td>
<td>21</td>
<td>10.50%</td>
</tr>
<tr>
<td>6-7</td>
<td>27</td>
<td>1.90%</td>
<td>1</td>
<td>0.50%</td>
</tr>
<tr>
<td>7-8</td>
<td>16</td>
<td>1.10%</td>
<td>0</td>
<td>0.00%</td>
</tr>
<tr>
<td>8-9</td>
<td>2</td>
<td>0.10%</td>
<td>1</td>
<td>0.50%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1394</strong></td>
<td></td>
<td><strong>200</strong></td>
<td></td>
</tr>
</tbody>
</table>
DP—Success and return rates

Graph showing the success and return rates from 2008 to 2015. The graph includes bars for Ineligible, Unsuccessful, Successful, Success rate %, and Return rate %.
DECRA—Success rates

![Graph showing success rates and number of proposals funded and not funded from 2012 to 2015.](image-url)
Future Fellowships—Success rate

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Laureate Fellows 2014: Success by discipline

*BSB = Biological Sciences and Biotechnology; EMI = Engineering, Mathematics and Informatics; HCA = Humanities and Creative Arts; PCE = Physics, Chemistry and Earth Sciences; SBE = Social, Behavioural and Economics Sciences

Source: 2014 Selection Report Table 5
Centres of Excellence 2014: Success by discipline

*BSB = Biological Sciences and Biotechnology; EMI = Engineering, Mathematics and Informatics; HCA = Humanities and Creative Arts; PCE = Physics, Chemistry and Earth Sciences; SBE = Social, Behavioural and Economics Sciences  
Source: 2014 Selection Report Table 1
NCGP Lifecycle

- Development of Funding Rules
- Eligibility Exemption Request
- Proposal Submission
- Request Not to Assess
- Assessment Process
- Rejoinder
- Selection Meeting
- Approval of Outcomes
- Funding Agreements and Appeals
- Post Award
- Development of RMS
- Recruitment of College of Experts or Selection Advisory Committee
- Eligibility
- Announcement
- End of Year and Progress Reports
- Final Report
Overview of Assessment Process

• ARC staff and Executive Directors assess eligibility etc., but do not decide which proposals should be funded.

• All proposals are assessed against the selection criteria, and in accordance with the weightings for that scheme.

• Proposals are generally assigned to two College of Experts members by EDs and at least two external assessors by the College.

• College of Experts meets to moderate judgments and to make final recommendations about fundable proposals and budgets.

• Under the ARC Act all recommendations are just that, and must be approved by the Minister.
Peer review by experts who assess individual research proposals

- Peer review by experts who assess individual research proposals within their field of research or across a broader disciplinary area on the basis of established selection criteria
- Processes under which arrangements for assessment are clearly articulated in published documentation
- Robust conflicts of interest processes to ensure conflicts are managed and transparent
- The receipt of proposals in confidence, except where required to be released under law, for example under the Freedom of Information Act 1982
- The provision of a right of reply to assessments (in most ARC schemes).
ARC College of Experts

- Plays a key role in identifying research excellence, moderating external assessments and recommending fundable proposals.
- Assists the ARC in recruiting and assigning assessors and in implementing peer review reforms in established and emerging disciplines as well as interdisciplinary areas.
- Comprises experts of international standing drawn from the Australian research community: from higher education, industry and public sector research organisations.
- ARC College nominations are approved by the ARC CEO for appointments of one to three years.
- In 2011 for 2012 meetings the ARC College of Experts was enlarged, the number of schemes it assessed was increased and the membership rotated between the major meetings.
- Previously the entire ARC College of Experts sat at the April and August meetings, and separate selection advisory committees met for specific schemes, e.g. Future Fellowships.
Assessment Process (1)

• The peer review process designed to be fair, thorough and transparent
• The ARC relies on two types of assessors - Detailed and General
• Detailed assessors drawn from the Australian and international research community
• Detailed assessors complete in-depth assessments of proposals by providing scores and comments against the scheme specific selection criteria
• These assessments are then taken into consideration by General assessors (ie College or SAC members) in the later stages of the peer review process
Assessment Process (2)

- General assessors are members of the College of Experts or a Selection Advisory Committee

- General assessors take into consideration the ratings and comments provided by Detailed assessors and the applicant’s rejoinder, and assign their own ratings to the relevant scheme selection criteria

- Once all assessments have been finalised and submitted to the ARC, Detailed and General assessments and Rejoinders are considered by the panels at the final selection meeting
Rejoinder

- Where the ARC seeks external assessments, applicants are given the opportunity to submit a Rejoinder.
- The Rejoinder process allows applicants to respond to assessment comments made by external assessors.
- Rejoinders are not viewed by external assessors but are considered by an ARC College of Experts Panel or SAC when deciding on the final recommendation for a Proposal.
- Timeframes for applicants are typically up to ten working days.

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Selection Meeting

• The Selection Meeting is the final face-to-face meeting of the panel of General Assessors and is the conclusion of the peer review process

• The panels meet to consider which proposals to recommend to the ARC for funding, and recommended budgets for those proposals

• All recommendations are given to the ARC CEO, who then makes recommendations to the Minister

• All funding decisions are made by the Minister under the ARC Act
“Research Opportunity is designed to provide assessors with an accurate appreciation of career history against a timeline of years since graduation from highest educational qualification. Assessors will recognise research opportunities and experience in the context of employment situations including those outside academia and the research component of employment conditions.

Periods of unemployment, or any career interruptions for child birth, carers’ responsibilities, misadventure, or debilitating illness will be taken into account. Access to research mentoring and other research support facilities and any other relevant aspects of career experience or opportunities for research will complete the considerations”.
ARC Assignment Information

• The ARC has completely redesigned the way that potential assessors are matched to a proposal for assessment purposes

• Multiple areas of the proposal are mined for a set of keywords and presented to the person completing the assignments as a word cloud
ARC Assignment Information (2)

- This information is then matched to information stored against a potential assessor’s profile and presented in a similar word cloud

![WordCloud Image]

- The most appropriate person is then selected and assigned to the proposal to assess.
ARC Assessors

- If you are not currently an assessor for the ARC and would like to become one then send:
  - a brief CV
  - list of five recent publications
  - or a web link to this information

  to  ARCAssessorUpdate@arc.gov.au
NHMRC and ARC Statement on Open Researcher and Contributor ID (ORCID)

14 April 2015

The National Health and Medical Research Council (NHMRC) and Australian Research Council (ARC) encourage all researchers applying for funding to have an ORCID identifier.

(www.arc.gov.au - > Media - > Media Releases)
Thank You