ARC funding and HCA
La Trobe University, Faculty of Humanities and Social Sciences
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Questions

• ARC and the funding landscape
• Patterns of applications and success by discipline/code
• Panels and cross-disciplinary applications

• Academic workforce issues: career age, gender, seniority, sector
• Trends in DECRA
• Trends in Linkage
• Linkage, HCA and national research infrastructure
More Information


ARC and the funding landscape
The ARC

National Competitive Grants Program
$884.0 M in 13-14

Discovery & Fellowships
$596.3 M

Linkage & Centres
$314.7M

Evaluation and Policy

Excellence in Research for Australia

- Statutory Agency established 2001
- Mission: *to deliver policy and programs that advance Australian research and innovation globally and benefit the community*
- Fund direct costs to Universities and partners
- All disciplines except clinical medicine and dentistry
Commonwealth Investment in R&D 2013–14

Industry R&D Tax Measures 19.44%
CSIRO 8.76%
DSTO 4.94%
Other Govt R&D 7.41%
Other Innovation Support 5.00%
ARC 10.23%
NHMRC 9.93%
Other health 1.00%
APA + RTS 10.93%
RIBG+JRE+SRE 8.48%
CRCs 1.67%
Rural 3.94%
Energy and the Environment 2.39%
Multisector Science Support 2.44%
Other Higher Ed R&D Support 3.39%

Source: Budget 2013-2014 Industry and Innovation tables
Trends in Government Investment in R&D % 2004–14

(source: 2013–14 budget tables)
National Competitive Grants Program

*Discovery Projects*

- Laureate Fellowships
- Future Fellowships
- DECRA
- Other Fellowships

*Linkage Projects*

- Centres of Excellence
- Co-Funded & SRI
- ITRP
- LIEF

Area of box represents $$ awarded over the period 2008-2013.
N.b. ITRP & DECRA running for less than five years.
## Budget 2014–15: ARC

### New measures

<table>
<thead>
<tr>
<th>Future Fellowships</th>
<th>ongoing</th>
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<tbody>
<tr>
<td>Support for Dementia</td>
<td>$26 million</td>
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<tr>
<td>Tropical Health and Medicine</td>
<td>$42 million</td>
</tr>
<tr>
<td>ARC Antarctic Gateway</td>
<td>$24 million</td>
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<tr>
<td><strong>MYEFO</strong></td>
<td></td>
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<tr>
<td>Juvenile Diabetes</td>
<td>$35 million</td>
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</table>
Budget 2014–15: ARC

Other Measures

- 3.25% Efficiency Dividend
- Revised Indexation – now CPI
- Departmental savings measures
NCGP Proposal Lifecycle
Each symbol represents up to 2 observations.
Patterns of application and success across the sector
Discovery projects: Size of scheme and success rates

**Discovery Projects 2008-2014: Success and Return Rates**

- **Number of Proposals**
  - 2008: 3234 proposals, 66.5% success rate
  - 2009: 3307 proposals, 54.0% success rate
  - 2010: 3143 proposals, 56.3% success rate
  - 2011: 3299 proposals, 55.3% success rate
  - 2012: 2756 proposals, 50.8% success rate
  - 2013: 2693 proposals, 60.8% success rate
  - 2014: 2831 proposals, 63.8% success rate

- **Success Rate**
  - 2008: 21.4%
  - 2009: 20.4%
  - 2010: 22.7%
  - 2011: 22.0%
  - 2012: 22.0%
  - 2013: 21.4%
  - 2014: 19.9%
Engagement by University
Strength in Linkage and Discovery Schemes
Australian Research Grants Committee 1974—
% funding share compared with ARC NCGP 2013
Patterns of application and success by discipline/FoR
Number of proposals received and funded by 2-digit FoR code

[past 4 years Discovery Projects and 5 years Linkage Projects]
Total ARC funding by major scheme and selected HCA/SBE disciplines (2012–14)
HISTORICAL STUDIES (2103) by 6-digit level FoR code (all schemes, regardless of primary classification code, years 2010/11–14)

Size of bubble indicates the total percentage of a 6-digit level code in all projects funded.
No funding awarded in Linkage Infrastructure, Equipment and Facilities (LIEF) scheme
Number and proportion of single and cross-discipline projects
(2010/11 to 2014)

Cross-discipline projects are those where the applicant indicated that the research content was distributed over at least two 2-digit FoR codes, with no more than 70 per cent in any one of those codes.

Single-disciplinary projects are those where the applicant indicated that more than 70 per cent of the research content in the proposal lay within a single 2-digit RFCD code.

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Primary Code Text</th>
<th>Cross</th>
<th>Single</th>
<th>% Cross</th>
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<tr>
<td>Discovery Projects</td>
<td>CURATORIAL ...</td>
<td>4</td>
<td>2</td>
<td>66.7</td>
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<td>16</td>
<td>69</td>
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<td>14</td>
<td>26.3</td>
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<td>Future Fellowship</td>
<td>HISTORICAL STUDIES</td>
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<td>19</td>
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<td>5</td>
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<td>Linkage Projects</td>
<td>CURATORIAL ...</td>
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<td>8</td>
<td>16</td>
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<td>HISTORY AND PHIL...</td>
<td>0</td>
<td>1</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Non-primary 4-digit FoR components in projects with primary FoR in Historical Studies (2010/11 to 2014), all schemes

Number shown is for percentage totals of the FoR
Number of single and cross-disciplinary projects (2010 to 2014), in Cultural Studies

Cross-disciplinary projects are those where the applicant indicated that the research content was distributed over at least two 2-digit FoR codes, with no more than 70 per cent in any one of those codes.

Single-disciplinary projects are those where the applicant indicated that more than 70 per cent of the research content in the proposal lay within a single 2-digit RFCD code.
Number of ECR—MCR researchers and success rate in DP (2011 to 2014)

- **ECR**—PhD received within 5 years
- **MCR**—PhD received within 5 to 15 years
Number of Chief Investigators and success rate in DP, by gender

<table>
<thead>
<tr>
<th>Year</th>
<th>Male %</th>
<th>Female applied</th>
<th>Male applied</th>
<th>Female %</th>
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<tr>
<td>2011</td>
<td></td>
<td></td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td>40%</td>
<td></td>
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HISTORICAL STUDIES
Cultural Studies (2002) by 6-digit level FoR code (all schemes, regardless of primary classification code) (2010/11 to 2014)

Size of bubble indicates the total percentage of a 6-digit level code in all projects funded.
Funding ($) for projects with primary 4-digit FoR in Cultural Studies by scheme (2011 to 2014)

No projects funded in LIEF scheme
Percentage totals of 6-digit level code (2010/11–14) (DP and LP)

**DP**
- 04 Cultural Theory
- 03 Consumption and Everyday Life
- 99 Cultural Studies not elsewhere classified
- 12 Screen and Media Culture
- 06 Globalisation and Culture
- 02 Asian Cultural Studies
- 05 Culture, Gender, Sexuality
- 09 Multicultural, Intercultural and Cross-cultural Studies
- 01 Aboriginal and Torres Strait Islander Cultural...
- 11 Postcolonial Studies
- 08 Migrant Cultural Studies

**LP**
- 04 Cultural Theory
- 03 Consumption and Everyday Life
- 99 Cultural Studies not elsewhere classified
- 12 Screen and Media Culture
- 06 Globalisation and Culture
- 02 Asian Cultural Studies
- 05 Culture, Gender, Sexuality
- 09 Multicultural, Intercultural and Cross-cultural Studies
- 01 Aboriginal and Torres Strait Islander Cultural...
- 11 Postcolonial Studies
- 08 Migrant Cultural Studies
Cross-disciplinary collaboration
Percentage totals of non-primary FoR codes in projects (2010/11 to 2014) all schemes

| Primary Areas                      | Agricultural and Veterinary Sciences | Biological Sciences | Built Environment and Design | Chemical Sciences | Commerce, Management, Tourism | Earth Sciences | Economics | Education | Engineering | Environmental Sciences | History and Archaeology | Information and Computing Sciences | Language, Communication and Cultural Studies | Law and Legal Studies | Mathematical Sciences | Medical and Health Sciences | Philosophy and Religious Studies | Physical Sciences | Psychology and Cognitive Sciences | Studies in Creative Arts and Writing | Studies in Human Society | Technology |
|-----------------------------------|-------------------------------------|---------------------|-----------------------------|-------------------|-----------------------------|----------------|-----------|-----------|-------------|------------------------|------------------------|------------------------------------------|-------------------------------------------------|--------------------------|------------------------|-----------------------------|----------------------------------------|-----------------------|---------------------------------------|-------------------------------------------------|----------------------------------------|------------------------|---------------------|
| Mathematical Sciences             |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Physical Sciences                 |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Chemical Sciences                 |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Earth Sciences                    |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Environmental Sciences           |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Biological Sciences               |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Agricultural and Veterinary Sciences |                                 |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Information and Computing Sciences |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Engineering                       |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Technology                        |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Medical and Health Sciences       |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Built Environment and Design      |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Education                         |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Economics                         |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Commerce, Management, Tourism     |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Studies in Human Society          |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Psychology and Cognitive Sciences |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Law and Legal Studies             |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Studies in Creative Arts and Writing |                                 |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Studies in Human Society          |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Philosophy and Religious Studies  |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Physical Sciences                 |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Psychology and Cognitive Sciences |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Studies in Creative Arts and Writing |                                 |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
| Philosophy and Religious Studies  |                                     |                     |                             |                   |                             |                |           |           |             |                                      |                                      |                                           |                                                  |                          |                        |                            |                                        |                       |                                       |                                                  |                          |                        |                      |
FOR Network mapping..
[Fruchterman reingold]

HASS disciplines highlighted

Source data:
http://www.arc.gov.au/general/searchable_data.htm
FOR Network mapping..
[Fruchterman reingold]
HASS - ZOOM
Academic workforce issues
ARC Research Opportunity and Performance Evidence (ROPE)

• The ARC is committed to ensuring all eligible researchers have fair access to competitive funding through the National Competitive Grants Program.

• The ARC considers that Research Opportunity comprises two separate elements:
  – Career experiences (relative to opportunity)
  – Career interruptions

• The new ROPE Statement (released Feb 2014) is online at: http://www.arc.gov.au/applicants/rope_statement.htm
Participation and success of CIs in DP13 and DP14 by gender and career age

- Male %
- Female %
- Male Success %
- Female Success %
Success rate (%) of HCA/SBE CIs in *Discovery* by career age (years post PhD) 2002–14

(Nota—fellow applicants have been included as funded on all funded projects)
Success rate (%) of HCA/SBE CIs in Discovery, by title and type of university (2002–14)

(Note—fellow applicants have been included as funded on all funded projects)
First-time awardees by scheme 2008–14

The bar chart displays the number of first-time awardees by scheme from 2008 to 2014. The x-axis represents the years, and the y-axis represents the number of awardees. The chart shows the following trends:

- **2008**: 500 awardees
- **2009**: 500 awardees
- **2010**: 500 awardees
- **2011**: 500 awardees
- **2012**: 600 awardees
- **2013**: 400 awardees
- **2014**: 300 awardees

The chart also indicates the percentage of first-timers, with a peak of 40% in 2012 and a general downward trend thereafter.

Legend:
- Red bars represent # DECRA first-timers.
- Blue bars represent # DP first-timers.
- Green line represents % first-timers.

The data suggests a significant increase in the number of first-time awardees from 2011 to 2012 and a subsequent decrease in subsequent years.
Trends in Linkage
The Money!

Average ARC funding, PO contribution and number of PO on each LP project

The Partner Organisation must make a significant contribution in cash and/or in kind, to the project that is equal to, or greater than, the ARC funding.
Some Linkage Stats: Funding and Success Rates

Linkage Projects Funding and Success rate

Since 2005 there have been nearly 2200 instances of collaboration with Australian private companies, as partner organisations on linkage grants.
Some Linkage Stats: Partner Orgs.

Linkage Projects - number of Australian private companies as Partner Orgs 2005 - 2013

Average 28% of projects

Linkage Projects - % Private companies and Government as Partner Orgs 2005-2013

The Linkage Projects scheme is a driver of collaboration between higher education researchers and other parts of the national innovation system.
Linkage—Instances of Collaboration by Org Type

- Non-Profit - International
- Non-Profit - Australian
- Higher Education - International
- Government - State & Local
- Government - International
- Government - Commonwealth
- Company/Industry Body - International
- Company/Industry Body - Australian
- Other
Linkage, HCA and national research infrastructure
Number of projects (all schemes) involving GLAM, by 2-digit FoR code (2008 to 2014)

- Biological Sciences
- History and Archaeology
- Environmental Sciences
- Studies in Creative Arts and Writing
- Earth Sciences
- Language, Communication and...
- Studies in Human Society
- Chemical Sciences
- Physical Sciences
- Philosophy and Religious Studies
- Law and Legal Studies
- Information and Computing Sciences
- Technology
- Built Environment and Design
- Agricultural and Veterinary Sciences
- Engineering
- Commerce, Management, Tourism...
- Psychology and Cognitive Sciences
ARC-funded projects involving GLAM organisations—major areas of research
Discussion/questions