University of Canberra and Australian National University
26th September, 2012

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Executive Director, Biological Sciences and Biotechnology
Australian Research Council
The ARC

- National Competitive Grants Program: $879.1 M in 12-13
- Discovery & Fellowships: $541.9 M
- Linkage & Centres: $337.2 M
- 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
Government Investment in R&D 2011-12

- Business & Innovation: 24%
- Universities: 21%
- CRCs: 2%
- NHMRC: 8%
- ARC: 9%
- Energy and the Environment: 5%
- Other Government: 11%
- Other Science: 4%
- Rural: 2%
- Other Health: 6%

$810m
ARC Strategic Objectives

- To *support* excellence in *research*
- To *build* Australia’s research *capacity*
- To *provide* informed high quality *policy advice* to government
- To *enhance* research outcomes through effective *evaluation*
- To *raise the profile* of Australia’s research effort and *be an effective advocate* for its benefits
Promoting Outcomes

- ARC wants to work with research offices to celebrate the research outcomes attained by its grant recipients.
- Reinforce to ordinary Australians (and politicians) that their tax dollars are being well spent on groundbreaking, exciting research.
- Feeding research outcomes into dialogue on Government policy is a challenge and an opportunity.
The bionic eye - how it works

Second prototype: High-acuity neurostimulator

1. Camera captures image and wirelessly transmits data to implant
2. Retinal implant and processor stimulates retina
3. Electrical signals sent from retina via visual pathway to vision processing centres in the brain

Image courtesy of Bionic Vision Australia
Modern History of the Linkage Scheme

- Ongoing Feedback from sector
- 2010 KPMG Review of Linkage schemes
- Policy context and strategies for the future
- Split of Linkage (LP) into LP + ITRP
  - Provides a continuum in size, focus and timing
ARC Linkage Program

- National Competitive Grants Program (NCGP)
- Linkage Program
- Linkage Projects
- Linkage Infrastructure, Equipment and Facilities
- Centres of Excellence
- Co-Funded Centres
- Linkage Learned Academies Special Projects
- Special Research Initiatives
- Industrial Transformation Research Program
Industrial Transformation Research Program (ITRP)

- On 9 December 2011, Prime Minister Julia Gillard announced the new *Industrial Transformation Research Program*, which will invest $236 million in quality Research and Development (R&D) partnerships.
- On 16 August 2012, Prime Minister Julia Gillard and the Minister for Industry and Innovation, the Hon Greg Combet confirmed that the ITRP will be finalised in the context of the Industry and Innovation statement.
- Funding Rules for ITRP are expected to be released later in 2012.
- Priority areas will be tightly focused.
Since 2005 there have been nearly 2000 instances of collaboration with Australian private companies, as partner organisations on linkage grants.
## Partner Orgs by Type - ACT

<table>
<thead>
<tr>
<th>Type of Partner Organisation</th>
<th>ANU</th>
<th>UC</th>
<th>All Australian universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government - Commonwealth</td>
<td>23%</td>
<td>37%</td>
<td>6%</td>
</tr>
<tr>
<td>Government - International</td>
<td>3%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Government - State &amp; Local</td>
<td>23%</td>
<td>30%</td>
<td>31%</td>
</tr>
<tr>
<td>Non-Profit - Australian</td>
<td>10%</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td>Non-Profit - International</td>
<td>3%</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td>Private Company - Australian</td>
<td>21%</td>
<td>21%</td>
<td>29%</td>
</tr>
<tr>
<td>Private Company - International</td>
<td>11%</td>
<td>3%</td>
<td>9%</td>
</tr>
<tr>
<td>Higher Education International</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
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</tbody>
</table>
Partner Organisation Views: Why Use LP Scheme?

- Chance of success is reasonably high: 47% important, 10% not important.
- Possible to obtain larger grants: 76% important, 2% not important.
- Access to highly skilled research personnel: 88% important, 2% not important.
- Opportunity to build long-term relationships with uni researchers: 92% important, 2% not important.
Success Rate: Comparison of Schemes

Success rate in commencement year 2012

- Linkage - Infrastructure
- Linkage - Projects: 36%
- Discovery Indigenous
- ARC Future Fellowships
- Discovery - Projects
- Australian Laureate Fellowships
- Discovery Early Career Researcher Award
Some Linkage Stats: Partner Orgs.

Linkage Projects - number of Australian private companies as Partner Orgs 2005-2012

Average 28% of projects

The Linkage Projects scheme is a driver of collaboration between higher education researchers and other parts of the national innovation system.
The Money!

Must include at least one Australian Partner Organisation.

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.
ARC Linkage Program

Summary of Significant Changes to the Linkage Projects Scheme:

The Linkage Program has two major changes:

1. The establishment of the Industrial Transformation Research Program (i.e. *Industrial Transformation Research Hubs* and *Industrial Transformation Training Centres*).

   ITRP
ARC Linkage Program

Summary of Proposed Significant Changes to the Linkage Projects Scheme:

2. Revision of the Linkage Projects scheme to complement the introduction of the Industrial Transformation Research Program, and to incorporate feedback from ARC consultation and the formal evaluation of the scheme.
ARC Linkage Program

In Detail:

- the minimum funding request from the ARC has been increased from $30,000 to $50,000 per annum,

and the maximum has been decreased from $500,000 to $300,000 per annum.
ARC Linkage Program

In Detail:

- The maximum length of a Linkage Project has been decreased from five years to three years

- The new ITRP hubs allow projects up to five years.
ARC Linkage Program

In Detail:

- the *contributions of Partner Organisations* have been clarified with respect to the source of cash that can be used to leverage ARC funding

i.e. funds cannot be derived from those previously awarded by the Australian Government for research
ARC Linkage Program

In Detail:

- The **types of organisations that may be exempt** from the cash requirement (i.e. start-up companies, charities, community organisations, museums and herbaria) have been identified
ARC Linkage Program

In Detail:

- To encourage more collaboration across the research and innovation system, cash and in-kind contributions for matching funds up to a total of 25% from other research organisations will be recognised.
ARC Linkage Program

In Detail:

- **Named Fellowships** within the *Linkage Projects* – Australian Postdoctoral Fellow (Industry) (APDI) and Linkage Industry Fellow (LIF) will no longer be offered.

Linkage Projects scheme still provides funding for unnamed postgraduate and postdoctoral researchers.

- The ARC will provide funding for new postgraduate and postdoctoral fellowships with the introduction of the inaugural Industrial Transformation Research Program, namely the Training Centres.
ARC Linkage Program

In Detail:

- A change in the Funding Rules relating to the ARC medical and dental research definition provides further clarification to the research sector regarding eligibility.
Medical and Dental

- ARC schemes, with the exception of Future Fellowships, do not support medical and dental research, defined as research and/or training primarily and substantially aimed at understanding or treating a human disease or human health condition.

- This includes, but is not limited to, Projects that involve any of the following...
Definition: Medical and Dental

a. late pre-clinical or early human trials of a human therapeutic agent, material or diagnostic test or device; or other interventional research involving humans;

b. using material collected from human subjects for the primary purpose of studying the underlying causes, prevalence, epidemiology or mode of inheritance of a disease or human condition; or

c. using established animal models or established cell lines for the purpose of studying the underlying causes, prevalence, epidemiology or mode of inheritance of a human disease or human health condition.
LIEF Consultation

- Targeted stakeholder survey conducted in first half of 2012
- All DVCsR were invited to participate (online Survey)
- Exploring options to:
  - Support a more strategic approach to allocating funding;
  - Allow for larger, multi-year grants;
  - better integrate LIEF objectives and funding with other Commonwealth research infrastructure programs; and
  - Provide a better balance of funding within and between research disciplines.
• New ARC CEO Prof. Aidan Byrne
• New ED Biological Sciences & Biotechnology; Dr Fiona Cameron
• ED Social, Behavioural and Economic Sciences; Prof. Marian Simms