



Research excellence

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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



Major ARC Schemes



Australian Government

Australian Research Council

- **Discovery Projects** –
 - Excellent fundamental research by individuals and teams
 - **Discovery Indigenous Researchers Development** –
 - Develop research expertise of indigenous Australians
 - **Australian Laureate Fellows** -
 - For outstanding researchers to stay in or return to Oz
 - **Future Fellows** –
 - Rewards best mid-career Australian researchers and outstanding international researchers
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- **Linkage Projects** –
 - Collaborative research between universities and industry/government/community
 - **Centres of Excellence** – Large outstanding research teams conducting focussed, sustained investigations on important challenging problems
 - **Linkage infrastructure, equipment and facilities (LIEF)** –
 - Collaboration across universities & partner organisations to fund major infrastructure





2008-2010 ARC Policy Changes

- **International collaboration**
 - *Discovery Projects* eg new support
- **New ways of building research capacity – 2008 for 2009**
 - *Future Fellows* – fills the midcareer gap
 - *Australian Laureate Fellows*
- **Enhancing research of Indigenous scholars (*DIRD*)**
 - *Discovery Indigenous Researchers Development* scheme
 - *New Australian Research Fellows – Indigenous*
 - *AIATSIS* added as an eligible organization
- **Centres of Excellence - new round in 2010/11**





Future Fellowships

- **\$844m scheme – 2009-2013 – Can apply twice in the period**
- **200, 4-year fellowships over next 5 years = 1000**
- **Mid-career researchers (5-15 years post-PhD)**
- **Australian and international applicants**
- **Salaries up to \$140K (3 levels) + \$50K pa for infrastructure, equipment, travel & relocation costs directly related to the research**
- **Has selection criteria ‘Strategic Alignment’ & ‘Collaboration’.**
 - **List of Research Strengths submitted by Administering Org.**
 - **Candidates must demonstrate capacity to build collaboration across industry and/or research institutions and/or disciplines.**
- ❖ **Research into Indigenous health and wellbeing a priority**





Discovery Indigenous Researchers Development

- **Applicants**
 - Australian Aboriginal or Torres Strait Islander descent
 - Need not have a PhD
 - Have not been CI on ARC grant or an ARC fellow except for ARF-I
- **Changes in 2009 for 2010**
 - Australian Institute for Aboriginal and Torres Strait Islander Studies (AIATSIS) can apply as an administering organisation (all ARC schemes)
 - **New Fellowship introduced:**
 - *Australian Research Fellows – Indigenous:* for 2 or 3 years
 - More senior, Not developmental
- **May be funded 1 to 3 years from \$10,000/year to \$200,000 or \$400,000 if includes an Australian Research Fellow-Indigenous**





Super Science Fellowships

- \$27.2 million over four years.
- 100 three-year early-career fellowships
- Will ensure our most promising young researchers continue to have opportunities to work in areas of national significance during the global recession.
- Offered in three areas:
 - Space science and astronomy;
 - Marine and climate science; and
 - Future industries research – biotechnology and nanotechnology.





Bionic Eye

- \$50 million over four years for research towards the development of a bionic eye.
- Part of the Australian Government's 2020 Summit response
- Australia has a world-leading capacity for bionic research
 - bionic ear was developed in Australia
- Applications opened 2 June, close 29 June
- Funding to be announced at the end of this year





ARC Centres of Excellence

- Established to support research intended to build national capability in areas of national importance and to develop the scale and focus necessary for Australia to achieve international standing in those areas.
- First funding round was in 2003. Funding was also awarded under this scheme in 2005 and 2007.

Consultation Paper

- Released on 23 June, responses due 21 July
- Outlines proposed changes to the scheme including:
- Proposes new round for funding in 2011





Australian Laureate Fellowships

- Announced in September 2008
- The 15 inaugural fellows were announced on 22 June
- Replaced the Federation Fellowships scheme
- Will allocate \$239 million, over 5 years
- Most prestigious Fellowships (Professor + \$100K)
- National and international applicants
- Emphasis on research leadership and mentoring
- Funds for 2 postdoctoral and 2 postgraduate researchers and project funding (up to \$300K)





Linkage Infrastructure, Equipment and Facilities

- Fosters collaboration through its support of the cooperative use of national and international research facilities
- Provides funding for large-scale cooperative initiatives so that expensive infrastructure, equipment and facilities can be shared
- 73 projects commenced in January, sharing funding of over \$31.6 m.
- Demand for funding under this scheme is high.
- Support for research infrastructure at all levels is necessary to underpin the capacity for universities to continue to play a strong role within the national innovation system





Excellence in Research for Australia (ERA)

- Announced on 26 February 2008
- \$35.8 million announced in 2009-10 Budget
- Will assess research quality within Australia's higher education institutions using a combination of indicators and expert review by committees comprising experienced, internationally-recognised experts





Discipline clusters

1. Physical, Chemical and Earth Sciences (PCE)
2. Humanities and Creative Arts (HCA)
3. Engineering and Environmental Sciences (EE)
4. Social, Behavioural and Economic Sciences (SBE)
5. Mathematical, Information and Computing Sciences (MIC)
6. Biological and Biotechnological Sciences (BB)
7. Biomedical and Clinical Health Sciences (BCH)
8. Public and Allied Health Sciences (PAH)





ERA: Lessons learned so far

Time needed to adjust thinking to the new approach

All spent a long time preparing for the RQF

RQF taught us some things

Senior administrators and research offices understand the new approach, researchers are taking some time to get up to speed

Workshops held with researchers have shown that once they understand, there is strong level of support for the approach

Competing agendas between researchers, research disciplines and university administrators

Esteem indicators are a good example of the tensions the ARC has to deal with





Interdisciplinary research

ERA is a discipline-based exercise, but seeks to recognise this research

Institutions can identify research by institutional unit and/or research theme so they can compile interdisciplinary profiles

Full ERA evaluations in 2010 will help

There are still issues of how we aggregate this information

Applied research

Will be included in ERA

Has the meaning used in the ANZSRC

Publications plus research commercialisation income and other applied measures relevant to each discipline





2009 ERA trial

- Submissions for the PCE Cluster closed 3 July
- Submissions for the HCA Cluster opens 3 August
- Submissions are through the ARC created IT system
 - System to Evaluate the Excellence of Research (SEER)
- Key documents (available at www.arc.gov.au):
 - *ERA Indicator Principles*
 - *ERA Indicator Descriptors*
 - *ERA–SEER Submission Guidelines*
 - *ERA–SEER Technical Specifications*
 - *ERA Evaluation Guidelines*
 - *ERA Indicator Benchmark Methodology*



Journal rankings



- The ranked journal lists have three functions in ERA.
 - determines the set of eligible journals for each cluster
 - allows the ARC to use FoR assignments to create FoR specific citation benchmarks (for relevant disciplines)
 - assigns journal articles into one of four quality tiers
- The ARC is working with over 400 expert reviewers to finalise the journal list for ERA in 2010.
 - This includes minor revisions to the PCE and HCA lists that are currently being used for the 2009 ERA trial.
- We have posted a 'new journal' form on the website, which helps us to collect the relevant information for each journal.





Research Evaluation Committees (RECs)

- Will evaluate data submitted for ERA
- Will be established at the discipline cluster level and comprise internationally-recognised researchers with expertise in research evaluation.
- Two RECs have been established for the 2009 ERA trial.
- For 2010, the ARC will establish eight RECs—one for each discipline cluster.



2010 ERA



- Expected that all clusters will be evaluated including Clusters One and Two.
- Census date is expected to move forward one year to 31 March 2009.
- Reference Periods are expected to move forward one year to 31 March 2009.

Data Type

Expected Reference Period

Research Outputs

1 January 2003 to 31 December 2008

Other measures

1 January 2006 to 31 December 2008

Citation Analysis

1 January 2003 to 1 March 2010





Ranked Conferences and Esteem

- Ranked conference and Esteem indicators will be included in the 2010 ERA.
- It is expected that ranked conferences will be used for some (Engineering, Political Sciences, Built Environment and Design and Computer Sciences) in the 2010 ERA evaluations.
- Discipline-specific, list-based esteem measures will be used for disciplines in the 2010 ERA evaluations.

