

RESEARCH in the national interest - enabling the future



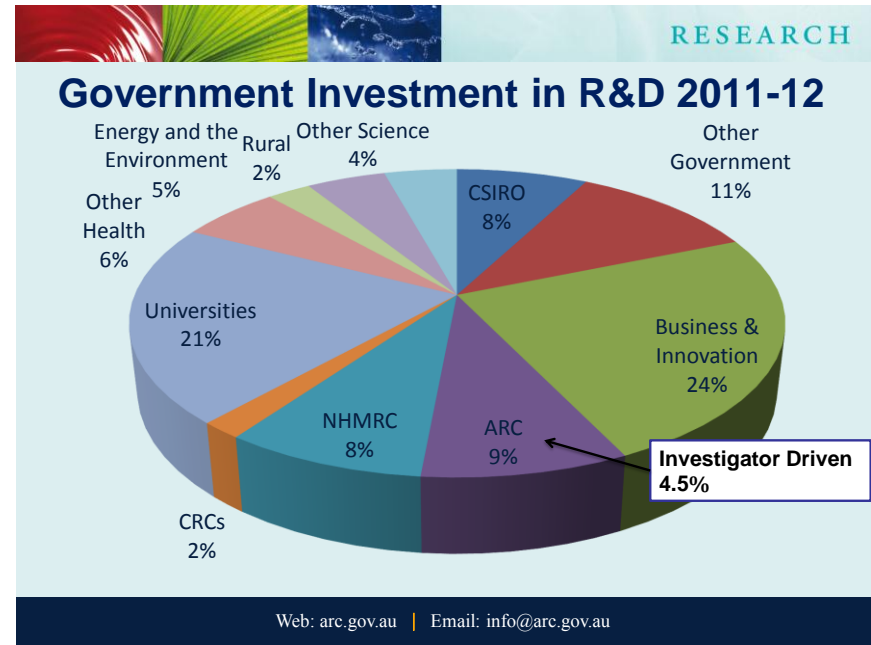
Australian Government
Australian Research Council

Measuring and enabling university research and innovation capacity

26 July 2011

Professor Margaret Sheil
CEO, Australian Research Council

Research



ERA

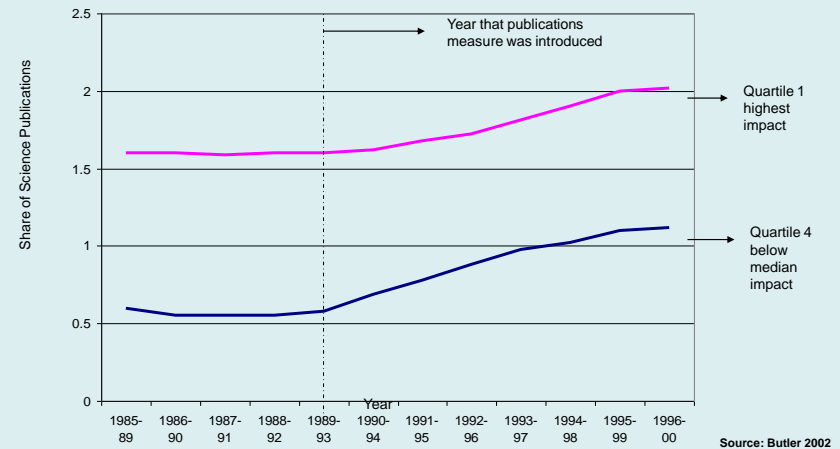
What problem were we trying to solve?

- Demonstrate quality/value of investment in university research to government
- Raise the quality of Australian research effort

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Australian academic publishing practices




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Excellence in Research for Australia

- 2007 New Government elected with a commitment to replaces RQF with a metrics based approach
- 2008 ARC given responsibility for quality framework
- 2008 Develop policy and case for funding and vice versa
- 2009 ERA Trial in physical sciences and humanities and creative arts
- 2010 ERA Full Evaluation
- 2011 Refinements to framework
- 2012 Next ERA round

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ERA Process Overview

- Volume and Activity
- Journal Quality
- Citation analysis or peer review
- Research Income
- Applied Measures
- Esteem

**Please note –
no weightings**

Research
Evaluation
Committee

→



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Strengths in Australian universities

- Astronomical and Space Sciences
- Optical Physics
- Quantum Physics
- Macromolecular & Materials Chemistry
- Physical & Structural Chemistry
- Geology
- Ecology
- Evolutionary Biology
- Plant Biology
- Zoology
- Clinical Sciences
- Electrical and Electronic Engineering
- Historical Studies
- Cardiovascular Medicine and Haematology
- Human Movement and Sports Science
- Immunology
- Oncology and Carcinogenesis
- Pharmacology and Pharmaceutical Sciences
- Medical Physiology

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Gaps

- Agriculture, Land and Farm Management
- Automotive Engineering
- Maritime Engineering
- Engineering Design
- Complementary and Alternative Medicine

Strong Applied Research

- Electrical and Electronic Engineering
- Crop and Pasture Protection
- Resources Engineering
- Materials Engineering
- Extractive Metallurgy
- Nursing

Pockets

- Classical Physics
- Aerospace Engineering
- Transportation and Freight

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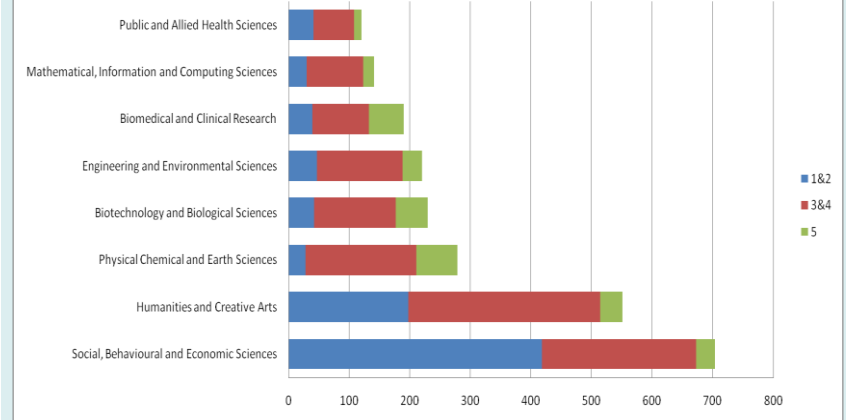
ERA 2010 myths

- ✗ Averages and Rankings
- ✗ Sciences v. Social Sciences & Humanities
- ☑ ERA does *not* evaluate individuals
- ☑ ERA does *not* evaluate individual outputs
- ☑ Ranked Journals did *not* drive ERA ratings
- ☑ ERA evaluations utilised metrics and peer review moderated by expert judgement

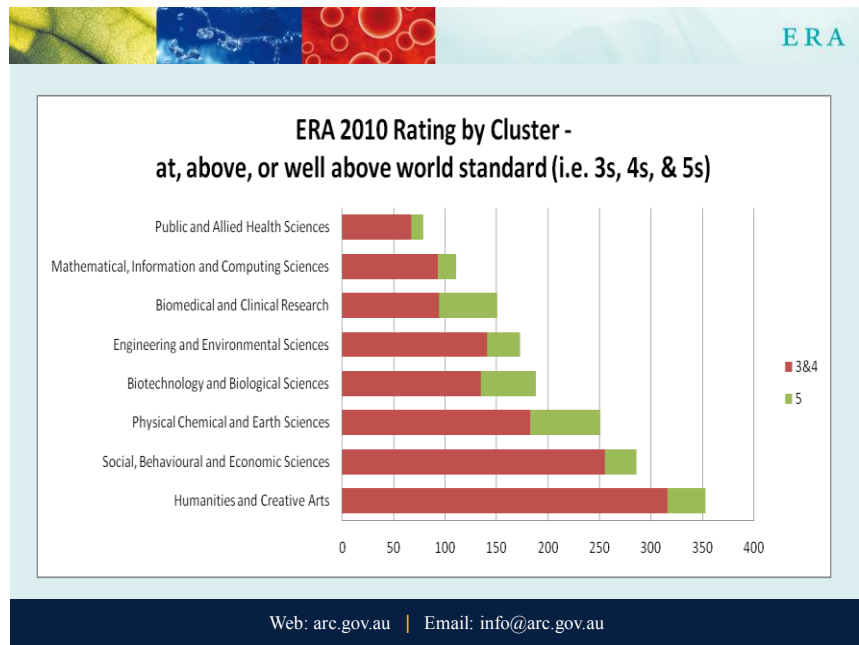
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ERA 2010 Ratings by Cluster



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Changes for 2012

- Changes to the ranked journals and conferences
- Interdisciplinary Research
- Raising the Threshold
- Capturing Applied Research
- Eligibility for fractional staff

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Unintended consequences-journal rankings

- Journals only easily accessible information
- Rapid response time
- Codified existing behaviour/practice
- Simplified application


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The refined journal indicator

	University of Y	FoR0201	Astronomical and Space Sciences	
			Contribution	Cumulative
	Journal Title	Papers		
1	Advances in Space Research	171	27%	27%
2	Applied Physics Letters	90	14%	41%
3	Nature	72	11%	52%
4	Astronomy and Astrophysics: a European journal	69	11%	63%
5	Geophysical Research Letters	51	8%	71%
6	Mathematics and Computers in Simulation	27	4%	75%
<i>Please note that this is not based on any university's submission to ERA 2010</i>				

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ERA 2012 – still to do

- **Draft Submission Guidelines have been issued to the sector in July 2011 for comment by Monday 1 August 2011**
- Expanding peer reviewer pool
- Making peer review more robust (selection of outputs, reviewers)
- Scrutiny of processes and outcomes
- System development and testing

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ERA outcomes - implications for institutions, government and other key stakeholders

- Changes in research culture (focus on excellence)
- Sustainable Research Excellence (from 2012)
- Compacts and Institutional Planning
- Tertiary Education Quality and Standards Agency ??
- Research Training Scheme (from 2013)

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Research Block Funding

- Research Income
- Research Student Completions and Load
- Publications
- ERA
- APAs
- IPRS
- *Research Training Scheme*
- Joint Research Engagement
- *Sustainable Research Excellence*
- CTS

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RESEARCH

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

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The ARC

National Competitive Grants Program
\$810M in 11-12

Evaluation and Policy


Discovery & Fellowships
\$502 M

Linkage & Centres
\$308 M

Excellence in Research for Australia

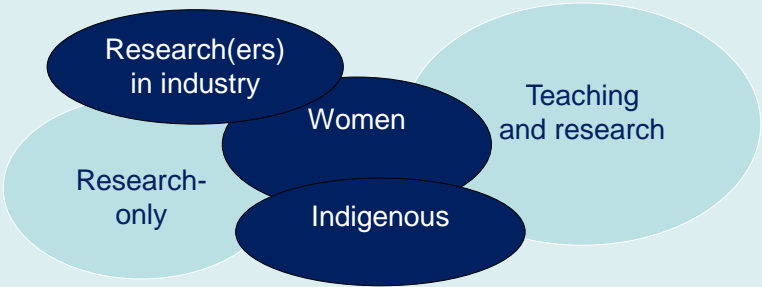
- Statutory Agency established 2001
- Mission: *to deliver policy and programs that advance Australian research and innovation globally and benefit the community*
- Fund direct costs to Universities and partners
- All disciplines except clinical medicine & dentistry

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The ARC aims to:

- Foster a range of different cohorts
- Create the right incentives for collaboration



Research(ers) in industry

Research-only

Women

Indigenous

Teaching and research

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GRANTS

Discovery Early Career Researcher Award (DECRA)

- Provide career opportunities for early-career researchers who have been awarded a PhD within five years or, commensurate with significant career interruption, within eight years
- Up to 200, three year Awards will be available each year, commencing in 2012.
- Funding of up to \$125,000 will be provided to support a fixed salary (\$85,000) and project costs.

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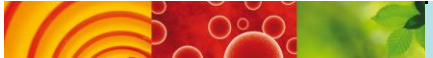


GRANTS

Researchers in Industry Training Awards (RITA)

- Up to 200 Awards will be available initially, 100 each in 2012 and 2014;
- Each Award will include a minimum research student stipend of \$30,000 per year; to be supplemented by funding from institutions and the industry partner to attract the best researchers.
- The individual Award recipients must spend a substantial period of their candidature working directly with the industry partner(s).

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Changing Language

Research Opportunity and Performance Evidence (ROPE)

- Changing how we measure excellence
Track record v. Performance evidence
- Assessors take into account any career interruptions, such as:
 - Childbirth
 - Carer's responsibility
 - Misadventure
 - Debilitating illness

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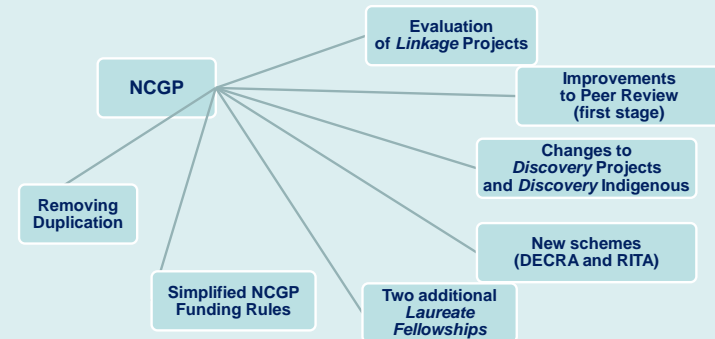
The ARC does not:

- Employ researchers directly
- Aim to provide a complete externally funded career structure
- Fund all the excellent research proposals it receives

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NCGP– the latest developments



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