International Conference on Women in Science and Engineering (WISE)

Wednesday 23 March 2011

Reaching for Excellence

Professor Margaret Sheil
CEO, Australian Research Council

Web: arc.gov.au   Email: info@arc.gov.au
Government Investment in Research
2010-11

- Universities: 21%
- Industry Tax Concession: 18%
- Energy and Environment: 6%
- CRCs & Other Science: 9%
- Other R&D Agencies: 11%
- Other business: 6%
- NHMRC et al: 12%
- CSIRO: 9%
- ARC: 8%
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
National Competitive Grants Program
$708M

Discovery & Fellowships
$423 M

Linkage & Centres
$285 M

Evaluation and Policy

Excellence in Research for Australia

- NCGP funding (2010-11) = $708,733 million
- $376 million – Major Grants supporting 1126 innovative projects
- $255.9 million – 13 new ARC Centres of Excellence
Instances of scientists on submitted proposals (all schemes)

Data for Year 2010 does not include all schemes.
Distribution of female scientists by funding scheme (2001-10)

Schemes where female scientists participate (2001-2010) - total 100% - not all schemes listed

- Linkage - APAI Only 2%
- Centres of Excellence 2%
- Linkage International 3%
- Linkage - Infrastructure 12%
- Linkage - Projects 17%
- Special Research Initiatives 4.4%
- Discovery - Projects 55.6%
Success rate of female scientists by funding scheme (2001-10)

Success rate by scheme (2001 - 2010)

- Special Research...
- Linkage Infrastructure
- Super Science Fellowships
- Linkage Projects
- Linkage International
- ARC Research Networks
- Discovery Indigenous
- ARC Future Fellowships
- ARC Centres of Excellence
- Discovery Projects
- Federation Fellowships
- Australian Laureate...
- Linkage - APD CSIRO
- SRI (Thinking Systems)

Female
Male

Web: arc.gov.au  |  Email: info@arc.gov.au
Participation of female scientists by funding scheme (2001-10)
Proportion of male and female applicants and corresponding success rates by career age (DPs, 2001-10)
Career age and success rate of female scientists
(DPs, 2001-10)
Career age and success rate of female scientists (DPs, 2001-10)
Funding split in Sciences by gender (2001-10)

- Mixed-gender projects: 32%
- Female-only projects: 6%
- Male-only projects: 62%
Percentage of female scientists on funded projects by 2-digit discipline (2001-09)
Funding instances for female scientists by 2-digit discipline (2001-09)

Note - Data is the total instances of funding for female scientists.
How do we then encourage women scientists to reach for excellence?
Changing language; changing landscape

Encouraging opportunity; not simply *providing* it

Re-enforcing leadership
CHANGING LANGUAGE; CHANGING LANDSCAPE
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
ENCOURAGING OPPORTUNITY
Encouraging Opportunity

Career interruptions

For ECRs and women researchers

Options to convert & teaching transitions

Web: arc.gov.au   |   Email: info@arc.gov.au
Australian Laureate Fellowships

- 2x PhD
- 2x Post-Doc
- 17 5-year awards

Discovery Early Career Researcher Award (DECRA)

- $125,000
- 200 p.a.
- 3-year awards

Researchers in Industry Training Awards

- $30,000
- 100 3-year awards (bi-annual)

Future Fellowships

- Up to $143,000
- 200 p.a.
- 4-year fellowships

Encouraging Opportunity
The ARC aims to:

- Provide opportunities for researchers at every career stage
- Foster a range of different cohorts

- Researchers in industry
- Women
- Research-only
- Indigenous
- Teaching and research
The ARC does not:

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

Elizabeth Blackburn, Nobel Laureate

President, Academy of Science

Chief Executive, ARC

Chief Executive, CSIRO

President, FASTS

Chief Executive, ATSE
ARC Federation and Laureate Fellows

2008
- Bernadette McSherry
- Cheryl Praeger

2009
- Frances Baum
- Tanya Monro
- Michelle Simmons

2010
- Lesley Head
- Jennifer Martin

2011
- Hilary Charlesworth
- Margaret Jolly
- Hanna Kokko
- Lorraine Mazerolle
Australian Laureate Fellowships

FOCUS:
• International repute
• Sustained leadership & mentoring

OBJECTIVES:
• Attract and retain outstanding research leaders
• Build and strengthen world-class research capability
• Provide excellent research – training environment
• Expand knowledge base
• Forge strong links
• Support research

Kathleen Fitzpatrick
Georgina Sweet
The ARC is committed to working with institutions to support careers in flexible and innovative ways in order to maximise opportunities for our talent.

Professor Margaret Sheil
CEO, Australian Research Council