NECTAR Annual Early Career Academic Retreat: NHMRC and gender equity

Professor Anne Kelso AO
Chief Executive Officer
National Health and Medical Research Council
My background

• Biomedical researcher
  – University of Melbourne, Swiss Institute for Experimental Cancer Research, Walter and Eliza Hall Institute, Queensland Institute of Medical Research, University of Melbourne/Doherty Institute
  – Peer review for NHMRC and ARC

• Director of Cooperative Research Centre for Vaccine Technology
  – Management of collaborative research partnership
  – Creation, development and management of IP
  – Commercialisation through pharmaceutical industry and spin-off company

• Director of WHO Collaborating Centre for Reference and Research on Influenza (Melbourne Health)
  – Global public health/virology laboratory
  – International engagement
  – Public health policy, pandemic preparedness
NHMRC: some reflections

• More than a funding agency
  – Support for medical research and researchers through Medical Research Endowment Account (MREA, ~$800m) and other funds from government
  – Research integrity and ethics: codes of research conduct and animal ethics
  – Evidence-based public health and clinical guidelines
  – Embryo Research Licensing Committee

• More than an office
  – Advice from Council, Principal Committees, peer review panels
  – 23,000 health and medical researchers

• The best of times, the worst of times
  – Big increase in investment in NHMRC over 20 years
  – Core research funding through MREA now plateaued
  – Prospect of Medical Research Future Fund
*Excludes Administered funding of $200m over 5 years for the Boosting Dementia Research measure in the 2014-15 Budget, that is outside of the MREA.
<table>
<thead>
<tr>
<th>Grant Type</th>
<th>NHMRC 2014 Application Round Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Apps</td>
</tr>
<tr>
<td>Career Development Fellowships</td>
<td>431</td>
</tr>
<tr>
<td>Centre of Research Excellence</td>
<td>83</td>
</tr>
<tr>
<td>Development Grants</td>
<td>142</td>
</tr>
<tr>
<td>Early Career Fellowships</td>
<td>578</td>
</tr>
<tr>
<td>International Collaborations</td>
<td>13</td>
</tr>
<tr>
<td>Infrastructure Grants</td>
<td>N/A</td>
</tr>
<tr>
<td>Partnership Projects</td>
<td>83</td>
</tr>
<tr>
<td>Postgraduate Scholarships</td>
<td>215</td>
</tr>
<tr>
<td>Program Grants</td>
<td>27</td>
</tr>
<tr>
<td>Project Grants</td>
<td>3700</td>
</tr>
<tr>
<td>Research Fellowships</td>
<td>303</td>
</tr>
<tr>
<td>Targeted Calls</td>
<td>7</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>5582</strong></td>
</tr>
</tbody>
</table>
### NHMRC funding at ANU

<table>
<thead>
<tr>
<th>Grant Type</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Apps</td>
<td># Funded</td>
<td>Funded Rate</td>
<td># Apps</td>
</tr>
<tr>
<td><strong>ANU Total All Schemes</strong></td>
<td>89</td>
<td>21</td>
<td>23.6%</td>
<td>94</td>
</tr>
<tr>
<td><strong>Career Development Fellowships</strong></td>
<td>10</td>
<td>2</td>
<td>20%</td>
<td>5</td>
</tr>
<tr>
<td><strong>Early Career Fellowships</strong></td>
<td>10</td>
<td>4</td>
<td>40%</td>
<td>11</td>
</tr>
<tr>
<td><strong>Postgraduate Scholarships</strong></td>
<td>1</td>
<td>1</td>
<td>100%</td>
<td>2</td>
</tr>
<tr>
<td><strong>Programs</strong></td>
<td>1</td>
<td>0</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>Project Grants</strong></td>
<td>58</td>
<td>12</td>
<td>20.7%</td>
<td>62</td>
</tr>
</tbody>
</table>
2013 Age Distribution of Project Grant CIA's

- Frequency
- Cumulative %

Age Distribution:
- 30: 4 CIA's, 11% (1%)
- 35: 68 CIA's, 24% (11%)
- 40: 84 CIA's, 43% (24%)
- 45: 120 CIA's, 62% (43%)
- 50: 127 CIA's, 80% (62%)
- 55: 116 CIA's, 92% (80%)
- 60: 78 CIA's, 97% (92%)
- 65: 28 CIA's, 100% (97%)
- 70: 19 CIA's, 100% (100%)
- More: 3 CIA's, 0% (100%)

Cumulative percentage of CIA's by age.
Funding required to maintain Project Grant funded rate at 2011 level of 23%

- Additional funding required to maintain funded rate at 2011 level of 23% ($m)
- Projects baseline ($m)

Application Year
(for funding to commence in the following year)
The funding situation today

• Rising demand, steady funding = declining success rates
  – A vigorous and highly competitive medical research sector
  – A predictable consequence of previous funding injections

• Special concern for early and mid-career researchers
  – Greatest pressure points in funding system
  – ECR are critical for our future
  – Impact on career options
  – Needs sector-wide thinking to build sustainable research workforce

• Prospect of Medical Research Future Fund
  – Projected doubling of medical research funding by ~2022/3
  – Likely to be different priorities and funding mechanisms from MREA
  – A few years before significant funds flow
  – Could transform the way we support and conduct medical research
Medical Research Future Fund Bill 2015

Context

The Medical Research Future Fund Bill 2015 gives effect to the Government’s decision (announced as a 2014-15 Budget measure) to establish a dedicated financial asset – the Medical Research Future Fund – as an endowment that supports medical research and innovation (including in health disciplines).

The Government wishes to accumulate assets that can be invested to create earnings used to financially support medical research and medical innovation over the long-term – such activity is expected to make a positive contribution to the health and wellbeing of all Australians.

Summary

The Bill establishes the Medical Research Future Fund on the later of the day after this Act receives the Royal Assent; or the day after the Medical Research Future Fund (Consequential Amendments) Act 2015 receives Royal Assent.

The Medical Research Future Fund consists of the:

- MRFF Special Account, and
- the investments of the Medical Research Future Fund.

The Medical Research Future Fund is a dedicated investment vehicle to provide a secure revenue stream to be used for medical research and medical innovation.
Gender equity: why is it an issue for NHMRC?

• Largest funder of health and medical research in Australia
  – >$800M of new grants will be awarded in 2015
  – Approximately 12% of the total funding for the Australian health and medical research effort

• NHMRC funded researchers employed by wide diversity of organisations
  – Universities
  – Hospitals
  – Independent Medical Research Institutes

• Obligation to ensure that Commonwealth funds are well spent
Gender equity: what is the issue?

Retention and progression of women in Australian health and medical research

2014 NHMRC Fellowship applications

<table>
<thead>
<tr>
<th>Fellowship Type</th>
<th>% women applicants</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECF</td>
<td>63%</td>
</tr>
<tr>
<td>CDF</td>
<td>54%</td>
</tr>
<tr>
<td>SRF A</td>
<td>27%</td>
</tr>
<tr>
<td>SRF B</td>
<td>37%</td>
</tr>
<tr>
<td>PRF</td>
<td>30%</td>
</tr>
<tr>
<td>SPRF</td>
<td>11%</td>
</tr>
</tbody>
</table>
Fellowship applications – 2014

![Graph showing fellowship applications by proportion for different categories: ECFs, CDFs, SRF A, SRF B, PRF, SPRF, for both women and men. The graph indicates varying proportions across different fellowship types, with some periods showing higher proportions for women compared to men.]
Research funding – 2014

Proportion of all 2014 MREA Funding

Basic Science

Clinical Medicine and Science

Public Health

Health Services Research
Gender equity: what has NHMRC done?

• Recognition of career disruptions and track record “relative to opportunity” in grant and fellowship assessments;

• Part-time NHMRC fellowships;

• Better balanced representation between men and women on peer review committees;

• Elizabeth Blackburn Fellowship to recognise outstanding women scientists;

• NHMRC Women in Health Science Committee; and

• Revised NHMRC’s Administering Institution Policy to place greater emphasis on gender equity.
**Institutional gender equity policies and practices**

- In 2013, Administering Institutions were asked to provide detail of:
  - activities and approaches in place to support gender equity within their institutions
- 46 (56%) institutions responded
- ONHMRC published examples of best practice:
  - Career Interruption Fellowships, in recognition that there are key points in female staff members lives which require an infrastructure of employer policies and programs.
  - Mentoring support provided at Faculty level for academics at various points in their career; voluntary and varied in nature and design.
  - Technical support to continue work while maternity leave is taken.
- Review showed wide variability
New requirements of Administering Institutions

- An institutional strategy that addresses the under-representation of women in senior positions in relevant strategic/corporate plans. This strategy should be reviewed frequently to ensure it is effective and relevant.
- Mentoring and skills training strategies that promote and seek to increase women’s participation.
- The provision of parental/maternity leave and carers leave, as well as transitional support to encourage return to work.
- Working arrangements that cater for individuals with caring responsibilities.
- Remuneration equity between women and men with the same responsibilities.
- Employment strategies that encourage the recruitment, retention and progression of women in health and medical research.
- Strategies to address the need for provision of support for childcare.
Women in science

• Much more needs to be done.

• NHMRC can be influential but cannot do it alone.

• Sector-wide change is required.

• We need:
  – Organisational change
  – Behavioural change
  – Structural change
  – Cultural change
NHMRC: looking ahead

• Manage the funding challenge
  – Review how we use the MREA to support the best research and researchers
  – Peer review: fit for purpose?
  – Leverage funding through national and international alliances
  – Ensure strategic alignment of the MREA and the MRFF

• Protect and build our investment in health and medical research
  – Gender equity
  – Look after the next generation
  – Promote innovation, commercialisation and translation
  – Enhance our international integration

• Promote the central role of evidence and integrity
  – Build the evidence base for health policy and practice
  – Foster the highest ethical standards in research

• Focus on the end-game
  – Better health for all Australians
  – Close the gap in Aboriginal and Torres Strait Islander health