NHMRC’s new grant program

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Director, Scientific Outreach and Digital Communications

WORKING TO BUILD A HEALTHY AUSTRALIA
NHMRC – a lot of change in 2018/19

- New grant program:
  - Investigator Grants = Fellowships + Research Support Package
  - Synergy Grants ≠ Program Grants
  - Ideas Grants ≠ Project Grants
  - Strategic and Leveraging Grants
    - Clinical Trials and Cohort Studies
    - TCRs
    - CREs, Development Grants, International and Partnership Centres and Projects

- New peer review processes:
  - Streamlining of processes
  - Changed assessment criteria, e.g. for track record assessment

- New grants management system: *Sapphire*
Development of New Grant Program: 2015 – 2018

2015:
- Planning

2016:
- Expert Advisory Group
- Consultation on funding models
- New Grant Program design

2017:
- Minister’s announcement
- Development of New Grant Program funding rules
- Consultation on peer review
- Announcement of peer review models
- Submission of funding rules to Government

Advice of Research Committee, Council and other Principal Committees
Implementation of the New Grant Program

2018
- Targeted consultations on grant guidelines
- Drafting and Government approval of grant guidelines

2019
- Applications open
- We are here
- Peer review of applications
- Announcements

2020
- Grants commence
New grant program – current issues

- Collaboration of new grant program
- Eligibility of Fellows to apply for Investigator Grants
- Opening and closing dates for Investigator Grants
- Track record framework: impact case studies
- Capabilities of *Sapphire*
- Role of NHMRC in MRFF
Effect of NGP on collaboration

- **Investigator Grants**: provide flexibility to form collaborations as required to progress a research program through funding
  - Think strategically on how to use funds to achieve goals; including collaboration
- **Synergy Grants**: support multidisciplinary teams
- **Ideas Grants**: assessment of feasibility will be based on expertise of team, including Associate Investigators (not TR based)
- **Strategic and Leveraging Grants**: include team-based schemes
Effect of NGP on collaboration

- NHMRC wants to encourage collaboration by providing flexible funding.
  - **Direct Research Costs:** can be used to contract expertise that might otherwise be an CI or AI

- Most people achieve more if they collaborate.

- Teams are more likely to be competitive for Ideas Grants than individual investigators.
Effect of NGP on collaboration

• Effective collaboration is demonstrated through co-publication – more important than being named on grants.
• New track record assessment framework will increase emphasis on research outcomes, rather than inputs (such as being named on a research grant), in track record assessment.
Eligibility of Fellows to apply for Investigator Grants

- NHMRC Fellows can apply for an Investigator Grant in the penultimate and final years of their fellowship:
  - allows two attempts
  - spreads application burden
  - spreads competition.
### Active fellowships on 1 January 2018 (n = 1369)

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Level</th>
<th>Active grants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Career Fellowships</td>
<td>-</td>
<td>607</td>
</tr>
<tr>
<td>Career Development Fellowships</td>
<td>1, 2</td>
<td>153, 89</td>
</tr>
<tr>
<td>Practitioner Fellowships</td>
<td>1, 2</td>
<td>35, 39</td>
</tr>
<tr>
<td>Research Fellowships</td>
<td>SRFA, SRFB, PRF, SPRF</td>
<td>110, 79, 100, 99</td>
</tr>
<tr>
<td>Translating Research Into Practice (TRIP) Fellowships</td>
<td>-</td>
<td>24</td>
</tr>
<tr>
<td>John Cade Fellowships in Mental Health Research</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Boosting Dementia Research Leadership Fellowships</td>
<td>-</td>
<td>32</td>
</tr>
</tbody>
</table>
## Funded rates in major schemes in 2017

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Applications</th>
<th>Funded</th>
<th>Funded rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Grants</td>
<td>3345</td>
<td>550</td>
<td>16.4%</td>
</tr>
<tr>
<td>Program Grants</td>
<td>31</td>
<td>8</td>
<td>25.8%</td>
</tr>
<tr>
<td>Early Career Fellowships</td>
<td>472</td>
<td>120</td>
<td>25.4%</td>
</tr>
<tr>
<td>Career Development Fellowships</td>
<td>388</td>
<td>61</td>
<td>15.7%</td>
</tr>
<tr>
<td>Research Fellowships</td>
<td>322</td>
<td>76</td>
<td>23.6%</td>
</tr>
<tr>
<td>Centres of Research Excellence</td>
<td>105</td>
<td>16</td>
<td>15.2%</td>
</tr>
<tr>
<td>Development Grants</td>
<td>96</td>
<td>19</td>
<td>19.8%</td>
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</tbody>
</table>

Overall funded rate for all schemes 19.3% (1035/5361)
Eligibility of Fellows to apply for Investigator Grants

- Depending on other grants held, Fellows may apply for Ideas Grants.
  - NB: if both investigator and ideas are successful, only the Investigator grant will be awarded.

- Concern that Investigator grant funding will go to a small group of applicants
  - Aim is to encourage broad representation of researchers
  - Only a minority of Investigator Grant holders will receive the highest RSPs.
    - E.g. number of individuals who hold six Project Grants is very low
Key dates for new grant program in 2018/19

- Investigator Grants
  - ‘Soft’ open – late October/early November 2018
  - Open 5 December 2018 – close 6 February 2019
  - Outcomes notified by August 2019

- Synergy Grants
  - Open 6 March 2019 – close 1 May 2019
  - Outcomes notified by November 2019

- Ideas Grants and Clinical Trials/Cohort Studies
  - Open 6 March 2019 – close 8 May 2019
  - Outcomes notified by November 2019
Key dates for Investigator Grant scheme – why?

• Open 5 December 2018 – close 6 February 2019
  o ‘Soft’ open with release of instructions to applicants and application template in October/November

• Staggered key dates for Investigator Grants and Ideas Grants
  o Limit overlap of peer review and application preparation/submission periods
  o Reduce peer review burden: remove Ideas Grant applications submitted by successful Investigator Grant applicants

• Coordinated to avoid ARC deadlines (RAO burden)
  o Discovery Projects close in late February
Framework for track record assessment in 2019
Investigator Grants

<table>
<thead>
<tr>
<th>1. Publications (35%)</th>
<th>3. Leadership (15%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 year list (taking Career Disruption into account)</td>
<td>Research programs and team leadership</td>
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<tr>
<td></td>
<td>Institutional leadership</td>
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<tr>
<td></td>
<td>Research policy and professional leadership</td>
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<tr>
<td></td>
<td>Research mentoring</td>
</tr>
<tr>
<td>Five best publications</td>
<td></td>
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<table>
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<tr>
<th>2. Research Impact (20%)</th>
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<tbody>
<tr>
<td>Knowledge</td>
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<tr>
<td>-------------------------------------------</td>
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</table>

Knowledge, Health, Economic, Social
Framework for track record assessment in 2019
Investigator Grants

1. Publications (35%)

10 year list (taking Career Disruption into account)

Five best publications

- Lasting contribution to the body of knowledge
- Share data
- Demonstrate ability to complete project
- Five best publications to focus on quality over quantity
- **Quality** assessment through peer review
Framework for track record assessment in 2019
Investigator Grants

1. Publications (35%)

10 year list (taking Career Disruption into account)

Five best publications

Issues:

• Encouraging reviewers to read papers
• Overcoming subliminal or undeclared use of poor metrics
• Recognising publications in appropriate journals for research field
• Reducing drivers to publish large numbers of poor quality papers
San Francisco Declaration on Research Assessment

General Recommendation
1. Do not use journal-based metrics, such as Journal Impact Factors, as a surrogate measure of the quality of individual research articles, to assess an individual scientist’s contributions, or in hiring, promotion, or funding decisions.

For funding agencies
2. Be explicit about the criteria used in evaluating the scientific productivity of grant applicants and clearly highlight, especially for early-stage investigators, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published.
3. For the purposes of research assessment, consider the value and impact of all research outputs (including datasets and software) in addition to research publications, and consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice.
Framework for track record assessment in 2019
Investigator Grants

2. Research Impact (20%)

| Knowledge | Health | Economic | Social |

- Shift focus to outcomes and outputs of research (rather than inputs, eg named CI)
- Encourage planning and engagement for impact from beginning of project
- Meet community and government expectations of public investment in research – achieve NHMRC’s purpose
Framework for track record assessment in 2019
Investigator Grants

2. Research Impact (20%)

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<th>Knowledge</th>
<th>Health</th>
<th>Economic</th>
<th>Social</th>
</tr>
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</table>

Case study (with evidence):

- Describe impact:
  - actual, not potential, impact
  - can be across one or more of the four categories

- Identify research that led to impact (research program)
- Identify applicant’s contribution to research that led to impact
Framework for track record assessment in 2019
Investigator Grants

- Encourage and reward contribution to discipline and sector beyond own research
- Deliberate focus on mentorship
- Expectations aligned with career stage
- Weighting reflects primacy of research achievements over leadership

3. Leadership (15%)

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New grant program implementation

• Evaluation of outcomes against objectives of the reform:
  o foster creativity and innovation
  o support for researchers at all career stages and from different disciplines
  o reduce burden on researchers

• Monitoring of impact on applications and grants:
  o application numbers and success rates
  o grant characteristics
  o funding of different fields, types of research etc

• Monitoring feedback from researchers and institutions
  o Evolution of funding rules
Peer review processes for new grant program

- Processes in 2019:
  - designed to support aims of each scheme
  - responsive to feedback from consultation
  - guided by advice of working groups
  - streamlined compared with current Project Grants process
  - focus on more independent reviews per application

- Further refinement anticipated in the future:
  - evolution of peer review processes and guidance
  - shorter cycles to enable two rounds a year for Ideas Grants
  - improvement of feedback to applicants
  - peer review training
Sapphire

‘Supporting Research Excellence’
Replacement of RGMS

*Sapphire – supporting research excellence*

- Iterative development with external reference group
- Intuitive user interface
- Data being transferred from RGMS – you will be invited to check
- Planned linkage to external data source for autofill, e.g. ORCID
- Pilot with small scheme
- Advanced semantic analytics in development:
  - support matching applications to assessors/panels
  - outcome reporting
Medical Research Future Fund
Medical Research Future Fund: 2018 Budget

<table>
<thead>
<tr>
<th>Year</th>
<th>Existing NHMRC Funding</th>
<th>MRFF Distributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-16</td>
<td>796</td>
<td></td>
</tr>
<tr>
<td>2016-17</td>
<td>807</td>
<td>61</td>
</tr>
<tr>
<td>2017-18</td>
<td>818</td>
<td>143</td>
</tr>
<tr>
<td>2018-19</td>
<td>829</td>
<td>222</td>
</tr>
<tr>
<td>2019-20</td>
<td>843</td>
<td>393</td>
</tr>
<tr>
<td>2020-21</td>
<td>855</td>
<td>650</td>
</tr>
<tr>
<td>2021-22</td>
<td>868</td>
<td>646</td>
</tr>
</tbody>
</table>

- **Existing NHMRC Funding**: $5.0 billion between 2016-17 and 2021-22
- **MRFF Distributions**: $2.1 billion between 2016-17 and 2021-22

*Source: 2018-19 Portfolio Budget Statements*
NHMRC and the Medical Research Future Fund

- CEO membership of Australian Medical Research Advisory Board
- NHMRC delivery of some MRFF schemes:
  - Clinical Researchers, Clinical Trials, TCR on Antimicrobial Resistance
- Evolving relationship:
  - Future use of NHMRC’s Investigator Grant and Clinical Trials schemes
  - Complementary strategies and priorities
  - Foundational role for NHMRC
    - National research capability
    - Ethical frameworks for research
    - *Sapphire* and analytical support
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  - Clinical Trials and Cohort Studies scheme

- New peer review processes:
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- New grants management system: *Sapphire*
Thank you