Peer review for NHMRC’s new grant program

Professor Anne Kelso AO
Chief Executive Officer
Objectives of the new grant program

- Encourage innovation and creativity across all fields of health and medical research
- Provide opportunities for talented researchers at all career stages and across all disciplines
- Minimise burden on researchers, freeing up time for research

... while retaining core focus on improving human health and wellbeing through research
NHMRC’s new grant program

**INVESTIGATOR GRANTS**
To support the research program of outstanding investigators at all career stages

**SYNERGY GRANTS**
To support outstanding multidisciplinary teams of investigators to work together to answer major questions that cannot be answered by a single investigator

**IDEAS GRANTS**
To support focussed innovative research projects addressing a specific question

**STRATEGIC AND LEVERAGING GRANTS**
To support research that addresses identified national needs – *Clinical Trials and Cohort Studies*
Peer review consultation

- Peer review processes were explicitly excluded from the Structural Review of NHMRC’s Grant Program in 2016-2017.
- NHMRC consulted on peer review processes for new grant program in 2017-2018. Feedback included:
  - need for appropriate expertise among peer reviewers
  - focus on impact and outcomes in track record assessment
  - support for streamlined processes
  - request for more feedback to applicants and reviewers

Goals in designing peer review for the new grant program

• Streamline peer review to reduce the burden on the research sector
  o reduce the number of touch points per application

• Improve the confidence of the sector in peer review
  o increase appropriate expertise per application

• Achieve more than one round per year
  o particularly for Ideas Grants

• Stagger application open/close dates across schemes
Considerations for the first year

- **Uncertainties:**
  - application numbers
  - impact on review and reviewer time

- **Major change for the research sector:**
  - new grant program
  - new grants management system (RGMS replacement)
  - new format for funding rules (Australian Government’s GrantConnect)

- Staged implementation of new peer review processes
INVESTIGATOR GRANTS

To support the research program of outstanding investigators at all career stages

- **Criteria: Track Record (70%) and Knowledge Gain (30%)**
  - new Track Record assessment framework: publications, impact, leadership
  - Knowledge Gain: research significance and quality
Framework for track record assessment

1. Publications
   - 10 year list (taking Career Disruption into account)
   - Five best publications

2. Research Impact
   - Knowledge
   - Health
   - Economic
   - Social

3. Leadership
   - Research programs and team leadership
   - Institutional leadership
   - Research policy and professional leadership
   - Research mentoring

- Shift focus away from inputs (e.g. grants received) towards outcomes
- Future trial of bibliometric indicators
# Framework for track record assessment in 2019

<table>
<thead>
<tr>
<th>1. Publications (35%)</th>
<th>3. Leadership (15%)</th>
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<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>Five best publications</td>
<td>Institutional leadership</td>
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<th>2. Research Impact (20%)</th>
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<tr>
<td>Knowledge</td>
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- Shift focus away from inputs (e.g. grants received) towards outcomes
- Future trial of bibliometric indicators
Framework for track record assessment: Impact
Research impact to be presented as a case study

<table>
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<tr>
<th>Knowledge</th>
<th>Health</th>
<th>Economic</th>
<th>Social</th>
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<tbody>
<tr>
<td>Evidence of scientific reach and influence</td>
<td>Engagement</td>
<td>Healthcare cost savings</td>
<td>End-user/public engagement</td>
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<td>Participation in clinical research</td>
<td>IP development</td>
<td>Community health benefit</td>
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<td>Policy leadership</td>
<td>Industry collaboration</td>
<td>Wellbeing of end-user and community</td>
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<td>Clinical guidelines</td>
<td>Start-up company</td>
<td>Reducing inequalities</td>
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<td>Standards</td>
<td>Product to market</td>
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<td>Development of product/intervention</td>
<td>Employment</td>
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INVESTIGATOR GRANTS: To support the research program of outstanding investigators at all career stages

- **Criteria: Track Record (70%) and Knowledge Gain (30%)**
  - new Track Record assessment framework: publications, impact, leadership
  - Knowledge Gain: research significance and quality

- **Streamline process to reduce peer review burden on research sector**
  - panel only, no interviews, discussion by exception
  - shorter process allows separation of open/close dates from Ideas Grants

- **Improve confidence in the review process**
  - five assessors per application
Peer Review for Investigator Grants (2019)

1. Submit application
2. 5-member panels assess application (all criteria)
3. Discussion by exception (teleconference or videoconference)
4. Ranked list based on overall score (Emerging Leadership & Leadership)
To support outstanding multidisciplinary teams of investigators to work together to answer major questions that cannot be answered by a single investigator.

- Criteria: Track Record (40%), Synergy (30%), Knowledge Gain (30%)
Synergy assessment

Intended to encourage:

• multidisciplinary research to address a major problem

• diverse research teams, e.g. by gender, career stage, culture

• engagement:
  • people with specialised knowledge (as CI, AI, consultant etc)
  • direct beneficiaries of research
To support outstanding multidisciplinary teams of investigators to work together to answer major questions that cannot be answered by a single investigator

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- **Criteria**: Track Record (40%), Synergy (30%), Knowledge Gain (30%)

- **Streamline process to reduce peer review burden on research sector**
  - panel only, no interviews, discussion by exception

- **Improve confidence in the review process**
  - at least five assessors per application
  - broad expertise to assess Synergy and Knowledge Gain
  - discipline expertise to assess Track Record of each Chief Investigator
Peer Review for Synergy Grants (2019)

1. **STAGE 1**
   - Submit application
   - Assessment by panel members (Knowledge Gain and Synergy)
   - Shortlist applications
   - Discussion by exception (teleconference or videoconference)

2. **STAGE 2**
   - 5 Assessors/Chief Investigator for Track Record (Track Record Framework)
   - Discussion by exception – individual Chief Investigator Track Records only (teleconference or videoconference)
   - Ranked list based on overall score (All criteria)
Peer Review for Synergy Grants (2019) – Stage 1

1. Submit application
2. Assessment by panel members (Knowledge Gain and Synergy)
3. Shortlist applications
4. Discussion by exception (teleconference or videoconference)
Peer Review for Synergy Grants (2019) – Stage 2

5 Assessors/Chief Investigator for Track Record (Track Record Framework)

Discussion by exception – individual Chief Investigator Track Records only (teleconference or videoconference)

Ranked list based on overall score (all criteria)
To support focussed innovative research projects addressing a specific question

- Criteria: Research Quality (35%), Innovation and Creativity (25%) Significance (20%), Feasibility (20%)
Innovation and Creativity assessment

• A specific criterion for the Ideas Grant scheme

• Intended to encourage fresh thinking

• Encompasses:
  o concepts, approaches, methodologies, interventions in all Broad Research Areas
  o incremental advances
  o not only commercial innovation
  o showing what doesn’t work
To support focussed innovative research projects addressing a specific question

• Criteria: Research Quality (35%), Innovation and Creativity (25%), Significance (20%), Feasibility (20%)

• Streamline process to reduce peer review burden on research sector
  o panel only, no external assessments or rebuttals, discussion by exception
  o shorter process allows separation of open/close dates from Investigator Grants

• Improve confidence in the process
  o four assessors per application
Peer Review for Ideas Grants (2019)

1. Submit application
2. Discipline Panels: Four Spokespersons score each application (all criteria)
3. NFFC and Rescue
4. Panel Meeting: All members score applications (all criteria)
5. Ranked List based on overall score
To support research that addresses identified national needs

Clinical Trials and Cohort Studies scheme

- Not capped relative to other three schemes
- Criteria: Significance (40%), Research Quality (40%), Team Quality and Capability (20%)
- Category descriptors designed for clinical trials and cohort studies
- Peer review process based on recent MRFF clinical trials schemes
Peer Review for Clinical Trials Grants (2019)

Submit application

Panel:
Spokespersons score each application
(all criteria)

Identify least competitive

Panel meeting:
Confirm least competitive applications
All members score remaining applications
(all criteria)

Ranked List based on overall score
What’s next?

Work is continuing on:

• Category descriptors for peer review of new schemes
• Guidance on peer review criteria (e.g. impact case studies)
• Open/close dates and peer review timetable for 2019
• Relative to Opportunity/Career Disruption policy
• Development of new grants management system
NHMRC’s new grants management system

- Replacing RGMS in 2018 in time for new grant program
- Iterative development in consultation with external reference group
- Intuitive new user interface
- RGMS data to be transferred to new system
- Linkage to external data sources (e.g. ORCID)
Implementation of the new grant program

2018
- Targeted consultations on funding rules

2019
- Drafting and Government approval of funding rules
- Publish funding rules
- Applications open
- Peer review of applications
- First grants awarded

2020
- Grants commence
In summary

• Peer review processes for new grant program in 2019:
  o designed to support aims of each scheme
  o responsive to feedback from consultation
  o streamlined compared with current Project Grants process

• Further refinement anticipated in the future:
  o evolution of peer review processes
  o two rounds a year for Ideas Grants
  o improvement of feedback to applicants
  o peer review training
Discussion
Thank you