NHMRC-ARC DEMENTIA RESEARCH DEVELOPMENT FELLOWSHIPS
PEER REVIEW GUIDELINES

for funding commencing in 2015
# TABLE OF CONTENTS

OVERVIEW OF PEER REVIEW PROCESS ................................................................. 1

1. ABOUT THIS DOCUMENT ............................................................................ 2

2. CONDUCT DURING PEER REVIEW .............................................................. 2
   2.1. Career Disruptions ................................................................................. 2

3. PEER REVIEW PARTICIPANTS ................................................................. 2
   3.1 Peer Review Participants Table ................................................................. 3

4 PEER REVIEW PANELS ............................................................................... 5
   4.1 Quorum ..................................................................................................... 5

5. PEER REVIEW PROCESS ........................................................................... 5
   5.1 Briefing Teleconference ......................................................................... 6
   5.2 Receipt and Initial Processing of Applications .......................................... 6
   5.3 Assignment of Applications to PRPs ......................................................... 6
   5.4 Identification of CoIs ............................................................................... 6
   5.5 Allocation of Spokespersons .................................................................... 6
   5.6 PRP Members Access to Applications ..................................................... 6
   5.7 Assessment of Applications ................................................................... 7
   5.8 Final Ranking ........................................................................................... 9
   5.9 Funding Recommendations ..................................................................... 9
   5.10 Notification of the Outcomes ................................................................. 9

ATTACHMENT A PRIORITY FRAMEWORK FOR DEMENTIA RESEARCH ........ 10

ATTACHMENT B FELLOWSHIPS SCORING MATRIX ..................................... 12

ATTACHMENT C SCORE NORMALISATION ..................................................... 13
Overview of Peer Review Process

Panels appointed

Briefing teleconferences

NHMRC-ARC Dementia Research Development Fellowships round closes

Allocation of applications to panels

Panel members declare Conflicts of Interest

External Assessment of Aboriginal or Torres Strait Islander Health applications

Applications allocated to Primary (1SP) and Secondary (2SP) Spokespersons

Panel members score applications

Ranking teleconferences

Final ranked list, scores and quartiles generated

Funding approvals process (RC, Council, CEOs and Ministers)

Anticipated notification of outcomes to applicants

Note: Dates are indicative only and subject to change
1. About this Document

The NHMRC-ARC Dementia Research Development Fellowships Peer Review Guidelines for funding commencing in 2015 (the Guidelines) describe the general process, procedures and timeline for peer reviewing applications for the scheme. They also contain important information about the conduct of peer review. The Peer Review Panels (PRPs) will be provided with separate detailed instructions for each phase of the peer review, including processes undertaken within the Research Grants Management System (RGMS).

These Guidelines complement the 2014 NHMRC Funding Rules incorporating the NHMRC-ARC Dementia Research Development Fellowships scheme for funding commencing in 2015 (the Funding Rules), which were made available to applicants to assist them in preparing and submitting their applications. It is important that the Guidelines be read in conjunction with the Funding Rules. Additionally, it may prove beneficial to review the NHMRC-ARC Dementia Research Development Fellowships Advice and Instructions to Applicants for funding commencing in 2015 (the Advice and Instructions). The Funding Rules and Advice and Instructions can be found at: www.nhmrc.gov.au/grants-funding/apply-funding/nhmrc-arc-dementia-research-development-fellowships.

2. Conduct during Peer Review


2.1. Career Disruptions

Peer reviewers are to assess each application against the priority framework and selection criteria (Attachments A and B) taking into account ‘relative to opportunity’ considerations including career disruptions, as outlined in Subsections 3.7 and 3.7.1 of the 2014 NHMRC Funding Rules.

‘Relative to opportunity’ should be taken into account for all applications, not just for those with a career disruption, to ensure that output versus opportunity is accurately assessed.

2.1.1 Sensitive Career Disruption

If the Career Disruption is of a highly sensitive nature, the applicant may not wish to share specific information with the Peer Review Panel and may have submitted details separately to NHMRC. For example, an applicant may consider their medical condition to be of a personal nature and therefore may wish to submit a Career Disruption claim separately.

Senior staff at NHMRC will review the sensitive career disruption claim. If the claim has been accepted, they will advise the panel on the period of time affected by the disruption. Details may also be provided of how the disruption may have affected the applicant’s track record.

3. Peer Review Participants

Participants in the peer review process are identified in the Peer Review Participants table below, including a description of their roles and responsibilities. Following the peer review process, key participants in the peer review process will be publicly acknowledged on the NHMRC website without reference to the specific application(s) that they assessed.
## 3.1 Peer Review Participants Table

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
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</table>
| **Community Observer**| The PRP may have independent observers present during teleconferences. Observers will be briefed on PRP procedures. They will not participate in the discussion of any applications.  
The primary duties and responsibilities of an observer are to:  
- identify and advise the NHMRC of all real or potential CoIs they have with applications;  
- monitor procedural aspects of the PRPs; and  
- provide feedback to NHMRC on the consistency of procedures. |
| **PRP Chair**         | The primary duties and responsibilities of the PRP Chair are to ensure NHMRC’s procedures are adhered to and that a fair and equitable consideration is given to every application being reviewed by the PRP. Chairs are appointed to be independent of the review of applications and to manage the process of peer review in accordance with these Guidelines. Chairs will:  
- familiarise themselves with documentation relevant to the scheme;  
- identify and advise the NHMRC of all real or potential CoIs they have with applications in their PRP;  
- confirm all CoI rulings and ensure appropriate action is taken in relation to declared CoIs;  
- familiarise themselves with ALL applications being considered by the PRP;  
- ensure that Observers are fully aware of the names and affiliations of the applicants under discussion to ensure CoI guidelines are followed;  
- ensure procedures are followed;  
- keep discussion on time and focussed;  
- promote good engagement by Spokespersons and PRP members;  
- ensure career disruptions are considered;  
- ensure consistency across reviews;  
- assist PRP members in fulfilling their duties and responsibilities; and  
- approve relevant Meeting Attendance Record sheets. |
| **PRP Member**        | The primary duties and responsibilities of a PRP member are to:  
- familiarise themselves with documentation relevant to the scheme;  
- identify and advise the NHMRC of all real or potential CoIs they have with applications in their PRP;  
- provide a fair and impartial assessment against the selection criteria in a timely manner; consider track record relative to opportunity;  
- provide scores against the selection criteria for all applications reviewed by the PRP; and  
- prepare for and participate in panel discussion of applications, paying particular attention to those applications for which they are 1SP or 2SP (see duties and responsibilities of 1SP and 2SP below). |
| **Primary Spokesperson (1SP)** | The primary duties and responsibilities of a 1SP in addition to that of a standard PRP member are to:  
- lead the PRP teleconference discussion on the competitiveness of the application with reference to the selection criteria;  
- assess whether the application fits under the dementia research framework as described at Attachment A.  
- glean any productivity ‘relative to opportunity’ considerations highlighted in the application and ensure these are considered by the other panel members in any discussion of the application; and  
- ensure career disruptions are brought to the attention of the panel; and  
- Indigenous Health Research Experts will write external assessments for those applications that have applied to undertake Indigenous Health Research. |
| **Secondary Spokesperson (2SP)** | The primary duties and responsibilities of a 2SP in addition to that of a standard PRP member are to:  
- glean any productivity ‘relative to opportunity’ considerations highlighted in the application and ensure these are considered by the other panel members in any discussion of the application; and  
- support the application discussion at the PRP teleconference on the competitiveness of the application with reference to the selection criteria. |
| **Indigenous health expert** | Indigenous health experts are Indigenous researchers or have Indigenous health research expertise. They will:  
- review Indigenous health research applications;  
- provide an external assessment on how each application meets the Indigenous Criteria;  
- recommend whether an application should be assessed as an Indigenous health application; and  
- provide advice to ensure research proposals meets the Indigenous Criteria. |
| **4.1.8 NHMRC Staff** | Under direction from the CEO, NHMRC staff will be responsible for overall administration of the peer review process and for the conduct of specific activities, including:  
- approach potential PRP members and Chairs;  
- assign applications to the appropriate panels and assign spokespersons;  
- act as an alternative independent chair when the Chair has a CoI with the application under consideration;  
- provide the following administrative support and advice to the Chair and members:  
  - facilitate use of RGMS;  
  - provide policy advice to the PRP Chair and members including on the management of CoIs;  
  - maintain accurate records of CoI;  
  - ensure that the Chair is aware of all CoI declared by members;  
  - provide advice on the treatment of declared CoI; and  
  - provide advice on dealing with sensitive career disruptions.  
- ensure that observers are fully aware of the names and affiliations of the applicants under discussion to ensure CoI guidelines are followed;  
- ensure that all PRP members and assessors are provided with the necessary information to review each application;  
- maintain scoring records for each application;  
- record outcome of PRP recommendations;  
- act as the first point of contact for PRP members; and |
4 Peer Review Panels

Each Peer Review Panel (PRP) will consist of at least five panel members and an independent Chairperson. The number of PRPs used to assess applications will depend on the number of applications received.

Panel members are chosen for their expertise and experience across the dementia research areas of discovery research, clinical, economic, cultural, biomedical, public health, social, population health, health intervention research and Aboriginal and Torres Strait Islander health. Geographical spread, gender balance and institutional representation are also considered when determining each panel’s membership. Members must have a PhD (Doctor of Philosophy) and expertise in an area of health and medical or science research deemed to be relevant.

NHMRC-ARC Dementia Research Development Fellowship applicants are not permitted to participate in the assessment process as panel members.

Following the allocation of applications to PRPs and identification of CoIs, if the NHMRC or Panel Chairs consider that the Panel membership requires augmentation, additional members with specific expertise will be identified and appointed.

In the event of a panel member withdrawing from the peer review process, the NHMRC will, if time permits, replace them with another member possessing appropriate expertise relevant to the PRP. If a replacement member cannot be found, the NHMRC will reallocate the application(s) within the relevant PRP, ensuring that the expertise required for each application is appropriately represented. If the panel member is contactable after withdrawing from the process, the NHMRC may contact the member with queries relating to the applications originally allocated to them.

4.1 Quorum

NHMRC has identified that three voting members (this does not include the Chair) are a sufficient quorum to score, discuss and rank applicants. Fewer than three members would require the appointment of an extra panel member to maintain a quorum.

5. Peer Review Process


Peer review of applications is a one step process. All applications assigned to each PRP will be scored by all PRP members. Competitive applications will be considered at the teleconference. Panel members will be required to agree on the final scores and ranking of these applications. An overview of the peer review process can be viewed at the beginning of this document.
5.1 Briefing Teleconference

Briefing teleconferences will outline the peer review process for the scheme and to highlight particular issues PRP members should be aware of and take into consideration.

5.2 Receipt and Initial Processing of Applications

NHMRC staff will verify that applications meet eligibility criteria (after they have been submitted). Applicants will be advised if their application is ineligible, however in some instances these applications will remain in the peer review process until their ineligibility is confirmed.

5.3 Assignment of Applications to PRPs

Applications are assigned to a PRP based on the fields of research under the dementia priority framework chosen by applicants within their RGMS application.

5.4 Identification of CoIs

Panel members will be provided access via RGMS to the Snapshot Summary Report of each application assigned to their PRP, and will declare their CoI in accordance with the guidelines provided by the NHMRC at http://www.nhmrc.gov.au/book/guide-nhmrc-peer-review-2015/4-principles-obligations-and-conduct-during-peer-review, Section 4.3.

Panel members will be given access to the full application only if they have no or a low CoI. Where panel members declare that they have a high CoI they will not be granted access to the full details of the application.

Some members may have a CoI for which they require a ruling. In this instance NHMRC will assess the information in the declaration made by the member and specify a level of participation in RGMS. Members are requested to ensure they include sufficient detail in their declaration to ensure an accurate CoI assessment can be made by NHMRC staff. Rulings on CoIs declared by panel Chairs will be confirmed by senior NHMRC staff.

CoIs must be declared at the beginning of the peer review process. However, CoIs may be declared at any stage of the peer review process if new conflicts become apparent. CoI guidelines also apply to Observers and they must be aware of their obligations under NHMRC’s Guidance for management of CoI. Observers must advise NHMRC of any real or potential CoIs they have with an application.

5.5 Allocation of Spokespersons

Taking into account CoIs and where possible the indicated preferences of PRP members, NHMRC staff will assign each application a 1SP and 2SP. It is expected that each member of the PRP (apart from the Chair) will be allocated an equal proportion of applications as 1SP and 2SP.

Panel members should read and score ALL applications for their panel carefully, but pay particular attention to those applications for which they are 1SP and 2SP.

5.6 PRP Members Access to Applications

All panel members will be provided with RGMS access to all applications assigned to their PRP, excluding those for which they have a high CoI. When accessing the full application, PRP members should again check whether they have a CoI not previously evident and notify NHMRC if a previously undeclared CoI exists. The PRP member may be required to delete the files pertaining to applications with which they are conflicted.
The “Download All” function of RGMS will enable PRP members to download the following documents required to review an application:

- ‘Assessor’ Snapshot (contains relevant sections of the application and Profile and CV required to assess the application, to be used by panel members and assessors);
- Uploaded documents which include:
  - **Mandatory documents**
    - ‘Evidence of the date applicants PhD was passed’ PDF
    - ‘Academic Transcript’ PDF
    - ‘Grant Proposal’ PDF
  - **If applicable documents**
    - ‘Letter of Explanation’ PDF if remaining at the same institution
    - ‘Supervisor Signed Agreement’ PDF if applying under the Health Professional Research Fellowship category
    - ‘Evidence of Australian registration in relevant dental or medical field’ if applicant holds dental/medical qualifications
    - ‘Evidence of Career Disruption’ PDF(s) if career disruptions exist

### 5.7 Assessment of Applications

#### 5.7.1 General Guidelines for Scoring of Applications

Panel members must critically examine all applications against the selection criteria (Attachment B), ‘relative to opportunity’, and taking into account any career disruptions. Panel members need to confirm that the applications fit under the dementia research framework as described at Attachment A.

#### 5.7.2 Assessment of Applications with an Aboriginal and/or Torres Strait Islander Health Focus

For applications with an Indigenous health focus, NHMRC will endeavour to obtain at least one external assessment from an Indigenous health expert.

The external assessor’s review will have a particular focus on the *Criteria for Health and Medical Research of Indigenous Australians* available at [www.nhmrc.gov.au/grants-funding/apply-funding/nhmrc-arc-dementia-research-development-fellowships](http://www.nhmrc.gov.au/grants-funding/apply-funding/nhmrc-arc-dementia-research-development-fellowships). The external assessor will also take into consideration applicants’ track record relative to opportunity.

#### 5.7.3 Scoring of Applications Prior to the Review Teleconference

Prior to the teleconference, PRP members must score all applications assigned to their panel against the selection criteria using the scoring matrix provided and confirm that the application fits under the dementia framework (Attachments A and B). The Funding Rules indicate that the entire track record for an applicant should be considered, taking into account career disruptions and ‘relative to opportunity’ considerations (for explanation of these concepts refer to the 2014 NHMRC Funding Rules, Subsections 3.7 Relative to Opportunity and 3.7.1 Career Disruption).

For applications with an Aboriginal or Torres Strait Islander health research focus, the assessment should take into consideration the *Criteria for Health and Medical Research of Indigenous Australians* and external assessment, where applicable.

The PRP will be provided with a scoresheet via email in which to enter their scores. PRP members should note the following points when scoring:

- Each panel member should ensure that all applications receive a different total score so that no two applicants are given the same rank.
• There should be no discussion of applications prior to the teleconference to ensure that PRP members provide ‘independent’ scores.

The criterion scores from each panel member will be normalised (see Attachment C) and combined to create a provisional ranked list of applications. These lists will be provided to all PRP members prior to the review teleconference together with an indication of the most competitive applications to be considered. The bottom scoring applications will not be discussed further at teleconference unless a major concern is raised by a PRP member at the teleconference.

5.7.4 Process for Review Teleconferences

Each panel will meet by teleconference to confirm their ranked list of applications.

During the teleconference:

1. The Chair will outline the format of the process.
2. With overall discussion being led by the Chair, the PRP should agree on the ranked list and scores of the most competitive applications assigned to their panel.
   i. Rankings and scores should only be altered if:
      a. More than one application is on the same overall score to ensure that no two applications have the same rank;
      b. An application has received significantly different scores from PRP members. This will be at the discretion of the Chair; and/or
      c. Two or more PRP members have indicated prior to the ranking teleconference that they wish to rescue a particular application from those marked as ‘Non-Competitive Application’ (least competitive applications, which otherwise will not be discussed). The Chair will be informed of any such applications prior to the teleconference.
   ii. Where a panel member has a high CoI with an application(s), the panel member will be excluded from participating in the discussion of that application(s). The PRP member may choose to disconnect from the teleconference for the discussion of that application(s).
   iii. For an application under discussion:
      a. 1SP and 2SP should briefly summarise the applicant’s case to the rest of the panel ensuring they communicate any ‘relative to opportunity’ or ‘career disruption’ considerations highlighted in the application to the panel.
      b. 1SP should raise and lead discussion on any additional areas of concern (e.g. level of independence, track record, applicant’s potential for a future high level research career etc.).
      c. Other PRP members can raise any additional issues as appropriate.
      d. All discussion should be related directly to the application’s strengths and weaknesses against the selection criteria only. It is important that the PRP consider the merits of the application in relation to the selection criteria rather than whether the application is considered fundable.
      e. PRP members should remember to take ALL selection criteria into consideration before changing a ranking.
      f. If the panel decides to alter the ranking of an application a justification against a particular selection criterion or criteria should be provided. This justification will be noted by NHMRC staff and the scores adjusted accordingly.
      g. Panel must confirm the final ranked order.
The panel Chair will be sent the final ranked list to confirm it reflects what was discussed at teleconference.

5.8 Final Ranking

NHMRC staff will use the final ranked list from each PRP to create an overall ranked list of applications.

This overall ranked list will be used in preparing the funding recommendations for Research Committee.

Those applications that are below the funding level but considered to be competitive will serve as the reserve placement listing.

5.9 Funding Recommendations

NHMRC will seek advice from its Research Committee and Council on the allocation of expenditure for the Fellowships. The highest quality applications will be recommended for funding in the order of the final ranked list until the available funds are expended. Research Committee and Council do not challenge the scores or relative ranking of applications as determined by the PRPs. In accordance with Subsection 7(1)(c) of the National Health and Medical Research Council Act 1992, the CEO accepts Council’s recommendation (as advised by Research Committee) and then formally seeks approval from the Minister with portfolio responsibility for NHMRC (currently the Minister for Health) to expend public money allocated for the Fellowships. In parallel with this process the ARC CEO will seek approval from the Minister for Education, using the same final ranked list.

5.10 Notification of the Outcomes

Applicants will be advised of the outcomes following both Ministers’ approvals of the funding recommendations.

All applicants will be provided with a letter stating the outcome of their application. Funding schedules will be provided for all successful applicants. Feedback will be provided to applicants in the form of an Application Assessment Summary. This summary will include the applicants score against each selection criterion, and their overall score and percentage quartile.

Details of the successful applicants will also be posted on the NHMRC and ARC websites following the joint announcement of the outcomes by the Minister for Health and Minister for Education.

Applicants seeking clarification on the outcome of their application, or to state an objection to any part of the process should contact their RAO. Further information on the outcomes process is available in Sections A7 and A8 of the 2014 NHMRC Funding Rules.
Priority framework for Dementia Research

The following priority framework for dementia research has been developed based on national and international strategies. The framework covers primary prevention, secondary prevention and quality of life and care. Possible areas of research focus are outlined under this framework. Peer reviewers will assess whether the applicant’s project falls under this framework.

**Primary Prevention to prevent the disease from developing**
Research into the fundamental causes of dementia disease, the factors that determine people’s risk and resilience and trigger events.

1. **Research into origins of dementia and related neurodegenerative disease, for example:**
   a. A focus on uncovering new genetic, epigenetic and environmental risk factors for neurodegenerative diseases and their interplay.
   b. A better understanding of the normal ageing process and how this relates to the development and progression of neurodegenerative diseases

2. **Research into disease mechanisms and models:** Research to understand the underlying disease mechanisms and thereby underpin development of new diagnostic and therapeutic approaches, as well as appropriate time-windows for intervention. Research could include, for example:
   a. Novel cell based and animal models that accurately represent key elements of the disease process, and that take into account factors such as the progressive nature of disease, comorbidities, gender and ageing.
   b. Elucidation of the biological and environmental basis of behavioural and psychological basis of neurodegenerative disease.

**Secondary Prevention and treatment for people developing dementia**
Research targeting early diagnosis, early intervention and new treatments including through development of new therapeutic approaches.

3. **Disease definitions and diagnosis research, for example:**
   a. Refinement and updating of the current diagnostic criteria including various forms and subtypes of disease (including stages before clinical symptoms occur) to allow earlier and accurate detection.
   b. New biomarkers that seek to provide link between human and animal based studies, as well as measures of disease progression, prognosis and treatment effects.

4. **Treatment and prevention research:** Enhance progress in identifying new targets and developing drugs and treatments. Research could include, for example:
   a. Studies to further develop psychosocial interventions and promotion of social inclusion and carer involvement.
   b. Establishment of cohorts of patients with preclinical disease for future testing of interventions.
c. Promotion of regenerative strategies and development of novel systems for delivery and targeting of drugs and biologicals.
d. Emphasis on understanding the most beneficial time-window for treatment efficacy.

**Quality of Life and Care**
Research to improve the quality of life for those with dementia and their carers. Health and aged care systems research to inform policy and enable the healthcare system to deal more effectively and efficiently with the rising number of individuals with dementia.

5. **Health and social care research:** Evaluate the equity of access to and the effectiveness and cost effectiveness of pathways to diagnosis, treatment, care and support for neurodegenerative disease. Research could include, for example;
   a. Improved outcome measures that reflect better patient and carer perspectives are necessary in research.
   b. Assisted living technologies to address the needs of patients and their carers.
   c. Research to inform palliative and end of life care.
   d. Research that takes into account the social, economic and cultural impacts and complex consequences of dementia.
Fellowships Scoring Matrix

Applications will be assessed to ensure they fit under the dementia research framework as described at Attachment A, and meet the scheme objectives using the following assessment criteria, which will be weighted as indicated. All criteria should be assessed ‘relative to opportunity’ and take into consideration any career disruptions.

### Part A – PERSONAL ACHIEVEMENT

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate / Honours / Other Degree</td>
<td>5</td>
</tr>
<tr>
<td>Research Experience and Professional Skills</td>
<td>10</td>
</tr>
<tr>
<td>Potential to succeed</td>
<td>10</td>
</tr>
<tr>
<td>- Supervisor Report (question 2)</td>
<td></td>
</tr>
<tr>
<td>- Justification for remaining in same research group</td>
<td>10</td>
</tr>
<tr>
<td>Prizes/Awards/Conferences Organised/Courses (attended and/or conducted)</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

### Part B – PROJECT

<table>
<thead>
<tr>
<th>Criteria Component 1: Quality of Project including feasibility, significance and impact relevant to the dementia research framework</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Criteria Component 2: Supervisor/Research Environment relevant to the proposed research project (Supervisor report questions 1, 3 and 4)</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td><strong>25</strong></td>
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</table>

### Part C – RESEARCH OUTPUT

<table>
<thead>
<tr>
<th>Criteria: Quality and Quantity including but not limited to publications, patents, influence on policy and research funding</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Note:</strong> It is recognised that Aboriginal and Torres Strait Islander applicants often make additional valuable contributions to policy development, clinical/public health leadership and/or service delivery, community activities and linkages, and are often representatives on key committees. If applicable, these contributions should be considered when assessing, research output and track record.</td>
<td><strong>40</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

**Total 100 points**
Score Normalisation

The method used for normalising scores is as described below.

First, a z score is established:
- For each panel member, the Mean (m) and Standard Deviation (s) of their raw scores for all applications is calculated.
- For each panel member, a z score for each application based on the raw score (x) given by the panel member for that application using this formula is calculated:

\[ z = \frac{x - m}{s} \]

Second, the z score is converted to a re-centered score (X):
The scores are re-centered (or scaled) around a common mean (M) of 75 and Standard Deviation (S) using the derived z score with this formula:

\[ X = M + (z \times S) \]