



Investigator Grants 2024 Peer Review Guidelines

Opening date: 13 September 2023

Closing date and time: 5:00 pm ACT local time on 8 November 2023

Commonwealth policy entity: National Health and Medical Research Council (NHMRC)

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1. Introduction

The National Health and Medical Research Council (NHMRC) is responsible for managing the Australian Government's investment in health and medical research in a manner consistent with Commonwealth legislation, guidelines and policies. NHMRC has a responsibility to ensure taxpayers' funds are invested appropriately to support the best health and medical research. Expert peer review assists us in fulfilling this responsibility.

This guide outlines the overarching principles and obligations under which the Investigator Grant peer review process operates, including:

- obligations in accordance with legislation, guidelines and policies
- how to disclose interests and manage conflicts
- standards and best practice for the conduct of peer review.

NHMRC will publicly notify the sector of any change in peer review process via its communications, such as through NHMRC's website and newsletters.

This guide should be read in conjunction with the:

- Investigator Grants 2024 Guidelines, available on [GrantConnect](#), which set out the rules, objectives and other considerations relevant to NHMRC funding.
- [Policy on the Disclosure of Interests requirements for prospective and appointed NHMRC committee members](#) (Section 39 Committees). This Policy outlines peer reviewers' responsibilities to ensure all disclosures of interests are addressed in a rigorous and transparent way throughout the period of a peer reviewer's participation in NHMRC Committees.

2. Key changes

NHMRC recognises the impacts of the COVID-19 pandemic on Australia's health and medical research community and has updated assessment processes to reflect these impacts.

Peer reviewers must continue to follow these processes:

- In track record assessment, peer reviewers must consider COVID-19 related circumstances, as outlined by applicants, as part of career disruptions or other relative to opportunity considerations under the provisions of NHMRC's *Relative to Opportunity Policy*.
- Peer reviewers should note that applicants have been advised that they may include information on any potential significant and long-term impacts of the COVID-19 pandemic on their proposed research, and proposals for managing such risks, as part of their research risk management plan within the grant proposal.
- Peer reviewers are not to let the potential impacts of the COVID-19 pandemic on the proposed research affect the assessment of the research proposal of an application (e.g. the feasibility of accessing certain patient or population groups with social distancing restrictions in place).
- Peer reviewers must note that changes to the research proposal of a funded application, necessitated by the impacts of the COVID-19 pandemic (e.g. the commencement of a project needs to be delayed by six months until COVID-19 restrictions are eased) will be considered through NHMRC's Postaward management and grant variations processes. Such considerations do not form part of the peer review assessment of the proposal, particularly given that the long-term impacts of the pandemic are still unknown.
- Applicants are not required to justify their research proposal with line-by-line budget

considerations. However, where the 5-year research vision contains research that could not be funded by the Investigator Grant, applicants have been asked to provide a justification/explanation of where the additional funds will be/have been sourced for that research in their response to the Knowledge Gain criteria (Grant Proposal). This is intended to assist reviewers in assessing feasibility of the research outlined in the 5-year vision.

3. Principles, conduct and obligations during peer review

The peer review process requires all applications to be reviewed by individuals with appropriate expertise. This carries an obligation on the part of peer reviewers to act in good faith, in the best interests of NHMRC and the research community and in accordance with NHMRC policies (outlined below).

3.1. NHMRC's Principles of Peer Review

NHMRC's Principles of Peer Review (the Principles) are high-level, guiding statements that underpin all NHMRC's peer review processes, and include:

- **Fairness.** Peer review processes are fair and seen to be fair by all.
- **Transparency.** Applies to all stages of peer review.
- **Independence.** Peer reviewers provide independent advice. There is also independent oversight of peer review processes by independent Chairs, Peer Review Mentors and Observers, where relevant.
- **Appropriateness and balance.** There is appropriate experience, expertise and representation of peer reviewers assessing applications.
- **Research community participation.** Persons holding taxpayer-funded grants should willingly make themselves available to participate in peer review processes, whenever possible, in accordance with the obligations in the Funding Agreement.
- **Confidentiality.** Participants respect that confidentiality is important to the fairness and robustness of peer review.
- **Impartiality.** Peer review is objective and impartial, with appropriate processes in place to manage disclosures of interest.
- **Quality and excellence.** NHMRC will continue to introduce evidence-based improvements into its processes to achieve the highest quality decision-making through peer review.

Additional details underpinning the Principles can be found at [Appendix A](#).

3.2. The Australian Code for the Responsible Conduct of Research

The [Australian Code for the Responsible Conduct of Research](#) (the Code) requires researchers participating in peer review do so in a way that is 'fair, rigorous and timely and maintains the confidentiality of the content'.

The Code is supported by additional supplementary guidance, including [Peer Review: A guide supporting the Australian Code for the Responsible Conduct of Research](#).

3.3. Use of generative artificial intelligence in peer review

Information provided to generative artificial intelligence (such as natural language processing models and artificial intelligence technology tools) becomes part of a public database and may be

accessed by third parties.

Peer reviewers must not input any part of a grant application, or any information from a grant application, into a natural language processing and/or artificial intelligence technology system to assist them in the assessment of applications.

Use of generative artificial intelligence may compromise the integrity of NHMRC's peer review process and be in breach of its [Principles of Peer Review](#), the [Australian Code for the Responsible Conduct of Research](#) and the confidentiality undertaking of peer reviewers.

3.4. Disclosures of interest

3.4.1. What is an interest?

NHMRC is committed to ensuring that interests of any kind are dealt with consistently, transparently and with rigour, in accordance with sections 16A and 16B of the *Public Governance, Performance and Accountability Rule 2014* (made under the subsection 29(2) of the *Public Governance, Performance and Accountability Rule 2013* (PGPA Act)).

In particular, under section 29 of the PGPA Act, "an official of a Commonwealth entity who has a material personal interest that relates to the affairs of the entity must disclose details of the interest". This obligation is ongoing and not limited to a particular point in time.

For the purposes of this document, the terms "material personal interest" and "interest" are regarded as interchangeable and whilst the term "interest/s" has been used for ease of reading, this policy includes guidance on each.

3.4.2. What is a conflict of interest (CoI)?

A CoI exists when there is a divergence between professional responsibilities (as a peer reviewer) and personal interests. Such conflicts have the potential to lead to biased advice affecting objectivity and impartiality. By managing any conflict, NHMRC maintains the integrity of its processes in the assessment of scientific and technical merit of the application.

For NHMRC peer review purposes, interests may fall into the broad domains of:

- Involvement with the application under review
- Working relationships
- Professional relationships and associations
- Social relationships or associations
- Collaborations
- Teaching or supervisory relationships
- Financial relationships or interests
- Other relevant interests or relationships

For further information, peer reviewers should consult the NHMRC [Policy on the Disclosure of Interests Requirements for Prospective and Appointed NHMRC Committee Members](#) (Section 39 Committees).

Researchers frequently have a CoI that cannot be avoided. Decision making processes in research often need expert advice, and the pool of experts in a field can be so small that all the experts have some link with the matter under consideration. An individual researcher should therefore expect to be conflicted from time to time, be ready to acknowledge the conflict and make disclosures as appropriate.

An outline of potential CoI situations and guidance is provided for peer reviewers at [Appendix B](#).

3.4.3. Disclosure of interests in the peer review process

Peer reviewers must identify and disclose interests they may have with any of the Chief Investigators (CIs) and Associate Investigators (AIs) on applications they will be reviewing. After appointment as a

peer reviewer, but before assessing any applications, peer reviewers are required to disclose their interests in writing. While interests must be disclosed at the beginning of the peer review process, new or previously unrecognised interests must be disclosed at any stage of the peer review process. Declarations must include details that substantiate when collaborations occurred (i.e. month and year). NHMRC will use these details to verify and determine the level of conflict. Any peer reviewer who has an interest that is determined by NHMRC to be a 'high' Col will not be able to participate in the review of that application. However, they can provide scientific advice at the request of NHMRC.

3.4.4. Failure to disclose an interest

A failure to disclose an interest without a reasonable excuse will result in the termination of the peer reviewer's appointment under section 44B of the NHMRC Act (section 44B also covers failure to comply with section 29 of the PGPA Act).

It is important for peer reviewers to inform NHMRC of any circumstances which may constitute an interest, at any point during the peer review process. Accordingly, peer reviewers are encouraged to consult the secretariat if they are uncertain about any disclosure of interest matter.

3.5. Freedom of Information (Fol)

NHMRC is subject to the *Freedom of Information Act 1982* which provides a statutory right for an individual to seek access to documents. If documents that deal with peer review fall within the scope of a request, the Fol process includes consultation and exemptions. NHMRC endeavours to protect the identity of peer reviewers assigned to a particular application.

3.6. Complaints

NHMRC deals with any complaints, objections and requests for clarification on the peer review process. NHMRC may contact peer reviewers involved to obtain additional information on particular application/s. Further information about the NHMRC complaints process can be found on the [NHMRC website](#).

4. Investigator Grants 2024 peer review process

4.1. Overview of the Investigator Grants 2024 peer review process

Step 1		Indicative dates
Applications submitted	Eligibility checks completed	Mid-late November 2023
Step 2		
Peer reviewer interests disclosed (conflicts of interest determined) and suitability declared for all applications	Assessments against the <i>Indigenous Research Excellence Criteria</i>	Mid November to early December 2023
Step 3		
Applications allocated to peer reviewers (approx. 15 to 25 applications per reviewer)	Independent assessment of applications	Mid-January to mid-February 2024
Step 4		
Ranked lists and funding recommendations generated	Outcomes announced	March to early May 2024

Date ¹	Activity
8 November 2023	Deadline for Investigator Grant application submission
Mid to late November 2023	Application eligibility review and confirmation
Late November to early December 2023	Peer reviewers disclose interests and suitability against applications
Mid-November to early December 2023	Assessments against the <i>Indigenous Research Excellence Criteria</i> /external assessments
Late January to late February 2024	Peer reviewers review applications and submit scores against Investigator Grant assessment criteria for each allocated application
March 2024	Internal quality assurance of assessments, including review of applicant feedback for inappropriate comments and checks to identify potential outlier scores ²
Late March to April 2024	Funding recommendations finalised and progressed through the approvals process
Early May 2024	Notification of outcomes under embargo

Further information on the steps outlined in this process is provided in section 4.3 Reviewing Investigator Grant applications.

4.2. Roles and responsibilities

The roles and responsibilities of those participating in the Investigator Grant peer review process are identified in the table below.

Investigator Grant peer review participants table

Roles	Responsibilities
Peer review mentors	<p>Peer review mentors (PRMs) are senior researchers with experience in conducting Investigator Grant peer review. The PRM's role is to assist with the training and mentoring of peer reviewers on peer review processes. PRMs do not assess applications or provide advice on the scientific (or other) merits of individual applications.</p> <p>PRMs need to:</p> <ul style="list-style-type: none"> • familiarise themselves with this document and other material as identified by NHMRC staff • mentor peer reviewers through the assessment stage of peer review, as required or requested, including responding to peer reviewer enquiries ensuring that: <ul style="list-style-type: none"> ○ the advice provided is consistent with NHMRC peer review processes and leads to an outcome where applications are appropriately considered against the Investigator Grant assessment criteria (Appendix C) and associated score descriptors (Appendix D) ○ peer reviewers consider relative to opportunity, including career disruptions where applicable ○ peer reviewers consistently consider the assessment against the <i>Indigenous Research Excellence Criteria</i> (Appendix E) for

¹ Dates are indicative and subject to change.

² Clarification sought from peer reviewers where required.

applications with an Aboriginal and Torres Strait Islander health focus.

Peer reviewers

Peer reviewers need to:

- familiarise themselves with this guide and other material as identified by NHMRC staff
- identify and advise NHMRC of all interests they have with applications assigned to them
- provide a fair and impartial assessment against the Investigator Grant assessment criteria and associated score descriptors (Appendices C and D) in a timely manner, for each non-conflicted application assigned to them
- assess track record by taking into consideration research achievements 'relative to opportunity' (record of research productivity and professional contribution in the context of career stage and circumstances), including any career disruptions, where applicable
- assess publication track record focusing on the quality and contribution to science rather than the quantity of publications
- consider the assessment against the *Indigenous Research Excellence Criteria* (Appendix E) provided for applications confirmed to have an Aboriginal and Torres Strait Islander health focus
- provide applicant feedback for each application assigned to them
- review applicant feedback from all peer reviewers for all applications assigned to them.

Senior NHMRC Staff

NHMRC staff with appropriate expertise may be involved in:

- reviewing allocation of applications to peer reviewers
- act assisting and advising on the peer review process.

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.

NHMRC staff will:

- invite individuals to participate in the Investigator Grants scheme peer review process as required
- determine whether disclosed interests pose a conflict and the level of that conflict
- act as the first point of contact for peer reviewers
- provide briefings to peer reviewers
- determine eligibility of applications
- assign applications to the appropriate peer reviewers based on peer reviewers' declaration of interests and suitability
- review peer reviewer applicant feedback for inappropriate comments
- perform checks to identify potential outlier scores against applications
- ensure that all peer reviewers are provided with the necessary information to review each application, and assisting and advising on the peer review process as required
- assist the PRMs in responding to peer reviewer enquiries
- act as the first point of contact for peer reviewers and community observers, and seek feedback from participants in the peer review process on improvements for future processes.

Indigenous health research peer reviewers

Applications nominated as Aboriginal and Torres Strait Islander health will be considered by an Indigenous health research peer reviewer with appropriate expertise in Aboriginal and Torres Strait Islander health.

Indigenous health research peer reviewers will review how well each application addresses NHMRC's *Indigenous Research Excellence Criteria* ([Appendix E](#)) where applicable.

Indigenous health research peer reviewers will not be required to participate in scoring. They will act as external experts and provide guiding comments to the peer reviewers relating to the *Indigenous Research Excellence Criteria*.

In some instances, Indigenous health research peer reviewers may also be invited to participate in scoring of applications. In these instances, they may also provide an assessment against the Investigator Grant scheme assessment criteria and associated score descriptors ([Appendices C and D](#)).

Community observers

NHMRC invites respected members of the general community to observe whether NHMRC policy and procedures are being adhered to during the peer review process. Observers assist NHMRC in ensuring that the assessment of all applications is fair, equitable and impartial. Observers will be briefed on the processes and procedures of the peer review of Investigator Grant applications. They will not participate in the review of any application.

Observers will:

- identify and advise NHMRC of all conflict of interests and monitor the procedural aspects of peer review
- provide feedback to NHMRC on the consistency of peer review processes and policies.

Observers may raise issues of a general nature for advice or action as appropriate with NHMRC staff.

4.3. Reviewing Investigator Grant applications

All Investigator Grant applications are assessed against the Investigator Grant assessment criteria and the associated score descriptors at [Appendices C and D](#). Applications that are accepted by NHMRC as relating to the improvement of Aboriginal and Torres Strait Islander health (see section 4.2.1) are also assessed against the *Indigenous Research Excellence Criteria* as set out at [Appendix E](#).

4.3.1. Applications with an Aboriginal and Torres Strait Islander health focus

Applications relating specifically to Aboriginal and Torres Strait Islander people's health will be identified by information provided in the application. Peer reviewers with Aboriginal and Torres Strait Islander health expertise will check whether these applications have at least 20% of their research effort and/or capacity building focused on Aboriginal and Torres Strait Islander health.

For applications confirmed as relating specifically to Aboriginal and Torres Strait Islander health research, NHMRC will endeavour to obtain at least one external assessment against the *Indigenous Research Excellence Criteria* ([Appendix E](#)) from an assessor with expertise in Aboriginal and Torres Strait Islander health. For further information on assessing applications that have a focus on the health of Indigenous Australians, see *Assessing applications against the Indigenous Research Excellence Criteria* at [Appendix F](#). The assessment against the *Indigenous Research Excellence Criteria* will be considered by peer reviewers when scoring the assessment criteria at [Appendix D](#).

4.3.2. Receipt and initial processing of applications

NHMRC staff will verify that Investigator Grant applications meet eligibility criteria. 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. Eligibility rulings may be made at any point in the peer review process.

Applications to the Investigator Grant scheme can be submitted in one of 2 categories, Emerging Leadership (EL) or Leadership (L) category, comprising 5 levels of salary (Level), as set out in **Table 1**.

Table 1: Investigator Grant Leadership Categories and Levels

Category	Salary levels	RSP tiers	Title
Leadership	L3	LT	NHMRC Leadership Fellow
	L2		
	L1		
Emerging Leadership	EL2	ELT2	NHMRC Emerging Leadership Fellow
	EL1	ELT1	

The EL category is restricted to researchers who are ≤ 10 years post-PhD or equivalent and comprises 2 salary levels (Levels) (EL1 and EL2) with corresponding Research Support Packages (RSPs). Recipients of EL Investigator Grants will have the title “NHMRC Emerging Leadership Fellow”. The L category comprises 3 Levels (L1, L2 and L3) and an RSP of \$400,000 per annum. The Statements of Expectations for each Level of Investigator Grant is at [Appendix G](#).

4.3.3. Disclosure of interests and peer reviewer suitability

Peer reviewers will be provided with a summary of each application and disclose their interests within Sapphire, in accordance with the guidelines provided at Section 3.3 and [Appendix B](#).

Some peer reviewers may have a disclosure of interest for which they require a decision. In this case, NHMRC will assess the information provided by the peer reviewer and provide a ruling on the level of Col.

Peer reviewers are also required to select their level of suitability to assess each application, based on the information available to them in the application summary. Further information and tutorials are available from [Sapphire](#).

4.3.4. Assignment of applications to peer reviewers

Taking into account Cols and peer reviewer suitability, NHMRC staff will assign applications to peer reviewers. It is expected each peer reviewer will be assigned approximately 10 to 25 applications. However, this is subject to change, depending on the number and peer review area of applications.

4.3.5. Briefing

NHMRC will provide peer reviewers briefing material with further details on their duties and responsibilities in the Investigator Grant peer review process. This will be made available to peer reviewers prior to assessing applications. Further information may be provided as necessary throughout the peer review process. Further information and tutorials are available from [Sapphire](#).

4.3.6. Assessment of applications

Peer reviewers will be given access to applications (where no high Col exists) and will be required to assess and enter their scores in Sapphire. Peer reviewers will assess all applications assigned to them against the assessment criteria, using the score descriptors, taking into account the Level applied for, the applicant’s Category/Level justification, career disruptions and other ‘relative to

opportunity' considerations ([Appendix H](#)), and [NHMRC Policy and Priorities](#), where applicable.

NHMRC will aim to obtain 5 independent assessments for each application.

Peer reviewers will be able to seek clarification from independent PRMs on peer review processes during the assessment phase.

Peer reviewers are required to provide written feedback for each application they assess, summarising the strengths and weaknesses of the application (applicant feedback). Peer reviewers must remember their obligation to remain fair and impartial when providing their feedback to applicants.

To ensure that independent scores are provided, peer reviewers are not to discuss applications with other peer reviewers.

Peer reviewers must ensure scores and applicant feedback are completed by the nominated due date. Extensions to assessment due dates will not be possible with the following round of Investigator Grants (2025) scheduled to open in mid-2024. It is essential that peer reviewers plan their workloads as best as possible and commence their assessments shortly after receiving their assigned applications. If peer reviewers are unable to meet this requirement, they must contact NHMRC promptly to discuss alternative arrangements. Following the completion of assessments, peer reviewers will be provided with the opportunity to view the de-identified applicant feedback provided by other assessors on their assigned applications.

Peer reviewers' scores will be used to create ranked lists of applications from which funding recommendations will be based. The overall score for each application will be determined using each peer reviewer's score for each of the assessment criteria. The overall score, as calculated arithmetically to 3 decimal places, will take account of the weighting of each criterion.

Following NHMRC's national consultation on options to reach gender equity in the Investigator Grant scheme during 2022, NHMRC implemented changes for the 2023 Investigator Grant round, continued for the 2024 round, to address systemic disadvantage of women and non-binary researchers and ensure the scheme supports a gender diverse and inclusive health and medical research workforce (see section 4.3.11). The changes to how NHMRC prepares rank ordered lists for the Investigator Grant scheme to ensure gender diversity and inclusivity should have no bearing on how peer reviewers assess applications.

4.3.6.1. Relative to opportunity and career disruption

Peer reviewers must assess productivity relative to opportunity and, where applicable, career disruption considerations, in the assessment of all applications. This reflects NHMRC's policy that peer reviewers should assess an applicant's track record of research productivity and professional contribution in the context of their career stage and circumstances, by taking into consideration whether the applicant's productivity and contribution are commensurate with the opportunities available to them. To assist peer reviewers with their assessment, further details of the *Relative to Opportunity Policy* are provided on [NHMRC's website](#) and at [Appendix H](#).

Reviewers are to consider, where relevant, years spent completing a PhD, in their assessment of applicant track record, relative to opportunity. Applicants have been advised to include time spent completing a PhD in their calculation of FTE research-active years.

Applicants are advised not to provide additional track record information in their Career Context free text field. Reviewers are to ignore any additional track record information provided in the applicant's Career Context field (e.g. career publication counts, total funding received, scientific summaries of projects and outputs).

Applicants must justify in their applications their selected Category and Level of Investigator Grant. This applicant justification will be considered by peer reviewers when reviewing an applicant's track record relative to opportunity.

The *Statements of Expectations* clarify NHMRC's expectations of applicants applying at each Level. Information on how to review applications where peer reviewers consider an applicant has applied at the incorrect Level and has not adequately justified the Level for which they have applied is at [Appendix G\(i\)](#).

To assist peer reviewers with their assessment, further details regarding relative to opportunity and career disruptions as well as track record assessment for Investigator Grant applications are provided at [Appendices H and I](#).

4.3.6.2. Mitigating bias in peer review

NHMRC is raising peer reviewers' awareness of unconscious bias in the assessment process, in alignment with international practice and to ensure that NHMRC grant applications continue to receive objective and impartial assessments. Understanding bias enables peer reviewers' to critically and independently review applications and avoid suboptimal or unfair outcomes.

This is underpinned by NHMRC's document: [Peer Review: A guide supporting the Australian Code for the Responsible Conduct of Research](#), which states that peer reviewers should be aware of how their own biases (conscious or unconscious) could affect the peer review process, including in relation to gender, ethnicity, nationality, institutional employer and research discipline.

To minimise or avoid bias, peer reviewers are encouraged to take action to address the unintended and systematic biases which prevent unprejudiced consideration of an application. To increase peer reviewers' awareness of the types of cognitive biases that can occur during peer review, NHMRC recommends the San Francisco Declaration on Research Assessment (DoRA) guidance on [Rethinking Research Assessment](#).

NHMRC is also committed to addressing gender equality to promote fairness, transparency, equality and diversity in health and medical research. Fostering gender equality in peer review is a strategic objective, underpinned by NHMRC's *Gender Equity Strategy*.

Peer reviewer participation in the online Harvard Implicit Association Test (IAT) for gender and science

In support of the objective, NHMRC encourages peer reviewers to complete the online IAT for gender and science. The IAT for gender and science, used by several research funding agencies nationally and internationally, is designed to help participants identify any implicit associations they may have between gender and participation in a science career.

By completing the test, peer reviewers gain a better understanding and increased awareness of how unconscious attitudes may affect their decisions, which prepares them to carry out their duties to the high standards of fairness and rigour expected by NHMRC. Peer reviewers should continue to follow all peer review principles and processes outlined in these guidelines, ensuring that each application is accurately reviewed against the assessment criteria ([Appendix C](#)). NHMRC does not have access to, nor does it seek, peer reviewers' information and results for the IAT for gender and science in the peer review process.

Peer reviewers must also familiarise themselves with any additional materials provided by NHMRC about unconscious bias awareness and implicit associations during the peer review process.

Use of gender-neutral language

To reduce unconscious gender bias, NHMRC has strongly advised applicants to use gender-neutral language. This will limit the opportunity for unconscious gender bias to affect the assessment process.

NHMRC also encourages peer reviewers to use gender-neutral language in the assessment of applications. When preparing written material peer reviewers should:

- avoid the use of gendered pronouns such as he/she or her/his, and instead use gender-neutral alternatives such as CIA/CIB, CI last-name or plural pronouns (they/their) when referring to applicants.
- avoid the use of first names
- use gender-neutral nouns where appropriate e.g. parental leave rather than maternity/paternity leave.

The use of gender-neutral language in applications is encouraged, but does not form part of the assessment criteria and therefore should not influence your scoring of applications. Peer reviewers are required to consider the proposal on its merits, taking relative to opportunity considerations into account when assessing track record.

Where gender dimensions are important for the research being proposed, applicants have been advised they should be included in the application. Please refer to scheme-specific score descriptors at [Appendix D](#) for information on whether gender dimensions are to be considered as a part of assessment.

4.3.6.3. Industry-relevant experience

Peer reviewers are to recognise an applicant's industry-relevant experience and outputs. To assist peer reviewers with their assessment, the *Guide to Evaluating Industry-Relevant Experience* is provided at [Appendix I](#).

4.3.6.4. Use of impact factors and other metrics

Peer reviewers are to take into account their expert knowledge of their field of research, as well as the citation and publication practices of that field, when assessing the publication component of an applicant's track record. Track record assessment takes into account the overall impact, quality and contribution to the field of the published journal articles from the grant applicant, not just the standing of the journal in which those articles are published.

It is not appropriate to use publication metrics such as journal impact factors.

The [San Francisco Declaration on Research Assessment](#) (DoRA) makes recommendations for improving the evaluation of research assessment. NHMRC is a signatory to DoRA and adheres to the recommendations outlined in DoRA for its peer review processes.

4.3.6.5. Assessment of the publication component of an applicant's track record

Peer reviewers are to consider their expert knowledge of their field of research, as well as the citation and publication practices of that field, when assessing the publication component of an applicant's track record.

Track record assessment considers the overall impact, quality and contribution to the field of the publications from the grant applicant, not just the standing of the journal in which those articles are published. It is not appropriate to use publication metrics such as Journal Impact Factors. Journal-based metrics, if included by an applicant, should not be taken into consideration in the assessment of publications.

Instead, peer reviewers are to focus on the creativity and innovation of ideas, rigour of experimental design, appropriate use of statistical methods, reproducibility of results, analytical strength of interpretations and significance of outcomes, all of which serve as surrogates for measuring research quality of a publication, irrespective of the field of research.

NHMRC also encourages the use of research quality guidelines such as the Hong Kong Principles for assessing researchers¹, which recommends focussing on responsible research practices, transparent reporting, open science, diversity of research and recognition of all contributions to research as hallmarks of publication quality.

The [San Francisco Declaration on Research Assessment](#) (DoRA) makes recommendations for improving the evaluation of research assessment. NHMRC is a signatory to DoRA and adheres to the recommendations outlined in DoRA for its peer review processes.

4.3.6.6. Enhancing reproducibility and applicability of research outcomes

Peer reviewers are required to consider the general strengths and weaknesses of the experimental design of the proposal to ensure robust and unbiased results. Assessment of the experimental design should include consideration of the following, as appropriate:

- scientific premise of the proposed research (i.e. how rigorous were previous experimental designs that form the basis for this proposal)
- techniques to be used
- details for appropriate blinding (during allocation, assessment and analysis)
- strategies for randomisation
- details and justification for control groups
- effect size and power calculations to determine the number of samples/subjects in the study (where appropriate)
- consideration of relevant experimental variables
- sex and gender elements of the research to maximise impact and any other considerations relevant to the field of research necessary to assess the rigour of the proposed design.

4.3.6.7. Research integrity issues

The peer review process can sometimes identify possible research integrity issues with applications or applicants (e.g. concerns about possible plagiarism, inconsistencies in the presentation of data, inaccuracies in the presentation of track record information) or the behaviour of other peer reviewers. NHMRC has established specific processes for addressing research integrity concerns that arise in peer review. Peer reviewers must not discuss their concerns with other peer reviewers as this may jeopardise the fair assessment of an application. Instead, these issues should be raised with NHMRC separately from the peer review process. Advice about how to raise concerns and a description of how this process is managed are provided on the [NHMRC website](#).

Applications that are the subject of a research misconduct allegation will continue to progress through NHMRC peer review processes while any investigations are ongoing. NHMRC liaises with the institution regarding the outcome of any investigation and, if necessary, will take action under the *NHMRC Research Integrity and Misconduct Policy* available on the [NHMRC website](#).

4.3.6.8. Contact between peer reviewers and applicants

Peer reviewers must not contact applicants about their application under review. If this occurs, the peer reviewer may be removed from the process, and there is the potential for exclusion from future NHMRC peer review.

Where an applicant contacts a peer reviewer, the relevant application may be excluded from consideration.

¹ <https://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.3000737>

In either case, contact between applicants and peer reviewers may raise concerns about research integrity and NHMRC may refer such concerns to the relevant Administering Institution.

4.3.7. Minimum number of assessments

The minimum number of assessments for an application is regarded as 50% plus one of the peer reviewers assigned to score an application. If there is an uneven number of peer reviewers assigned to an application, the minimum number of assessments is the next full number after 50% (e.g. three assessments in the case of five peer reviewers).

4.3.8. Principles for setting conditions of funding for NHMRC grants

Setting a condition of funding (CoF) on a grant through the peer review process is, and should be, a rare event. When this does occur, the peer reviewers or NHMRC will use the principles set out below to decide the CoF. These principles aim to achieve a consistent approach, minimise the number of conditions set and ensure conditions are unambiguous and able to be assessed.

CoFs relate to the award of funding, the continuation of funding or the level of funding. They do not relate to conditions which affect either eligibility to apply or subsequent peer review.

The principles are:

- NHMRC seeks to minimise the administrative burden on researchers and Administering Institutions.
- CoFs must not relate to the competitiveness of an application (e.g. project requires more community engagement); these issues should be considered during peer review and be reflected in the scores for the application.
- Any CoFs must be clear and measurable, so that the condition can be readily assessed as having been met.

4.3.9. Providing feedback on applications

When conducting assessments, peer reviewers are required to provide constructive qualitative feedback to applicants that focus on the strengths and weaknesses of the application (applicant feedback).

When providing feedback, you should use neutral language and focus only on what has been provided in the application, avoiding extraneous comments or considerations you might have about the research/er. Feedback should be factual and dispassionate. Avoid reference to your own experience of reviewing the application or overly expressive words that convey emotion. You should be always mindful to frame your feedback against the **assessment criteria and score descriptors**.

The lists below provides guidance to peer reviewers on what NHMRC considers appropriate or inappropriate when providing feedback on grant applications.

Avoid comments that:

- Are not relevant to the assessment criteria
- Make specific comparisons between applications/applicants
- Are discourteous, derogatory, unprofessional or use emotive or overly expressive (positive or negative) language
- Employ an overly negative or critical tone (i.e. instead of “the applicant failed to”, use “it would improve the application if”)
- Use overly expressive language and words that convey emotion (e.g. “disappointingly”, “unfortunately”, “failed to”)
- Represent your personal views or attitudes towards a statement written by the applicant/s
- Refer to your ability/suitability to review the application
- Employ a negative or critical tone
- Refer to issues that are out of the applicant’s/reviewer’s control (e.g. “This application deserves to be funded”)
- Provide broad statements which suggest the application is worthy or not worthy of funding
- Minimise accomplishments or claims made by the applicant/s
- Use dismissive language or statements that discount or belittle an application or applicant/s
- Use stylistic choices that convey the feelings of the reviewer such as rhetorical questions, speculation or punctuation such as exclamation marks.
- Use universal language (e.g. “any expert knows”)
- Question issues of eligibility or integrity of the application or applicant/s. This should be raised with NHMRC separately.
- Focus on the quantity of publications rather than the quality and contribution to science
- Reflect on the recency of the research program that underscores the claimed research impact.

Instead:

- Highlight the key elements of the application that influenced your scores
- Consider the strengths and weaknesses of the application against each assessment criterion
- Use score descriptors associated with the assessment criteria and ensure they are addressed
- Focus on the information that is provided in the application
- Provide constructive feedback that reflects your scores
- Provide neutral statements
- Write with an objective tone
- Indicate if the Level selected or applicant Category/Level justification impacted your scores/assessment
- Provide specific advice or references to relevant bodies of work you think the applicant/s may have overlooked
- Focus on the quality of publications and contribution to science.

4.3.10. Documentation

Peer reviewers may be required to retain personal notes that they made during the peer review process for a certain period, and if so, these must be held securely and in accordance with reviewers' obligations of confidentiality. NHMRC will notify peer reviewers of any such requirements prior to the peer review process.

4.3.11. Funding recommendation

Application scores from all peer reviewers are used to create a ranked list. This final ranked list will be used to prepare funding recommendations to NHMRC's Research Committee and Council for advice to the CEO, who will then make recommendations to the Minister for Health and Aged Care.

4.3.12. Notification of outcomes

NHMRC will notify applicants and their Administering Institution's Research Administration Officer of grant application outcomes.

Feedback will be provided to all applicants in the form of an Application Assessment Summary (and a written summary from each assigned peer reviewer). The Application Assessment Summary will contain numerical information on the competitiveness of the application that will be drawn from the scores given by peer reviewers.

Appendix A. Understanding the Principles of Peer Review

Fairness

- Peer review processes are designed to ensure that peer review is fair and seen to be fair by all involved.
- Peer reviewers have an obligation to ensure that each application is judged consistently and objectively on its own merits, against published assessment criteria. Peer reviewers must not introduce irrelevant issues into the assessment of an application.
- Peer reviewers must only address information provided in the application based on its relevance to the assessment criteria. Any information or issues relating to the applicant(s) outside of the application must not be considered in the peer reviewers assessment. Applications will be subject to scrutiny and evaluation by individuals who have appropriate knowledge of the fields covered in the application.
- Peer reviewers should ensure that their assessments are accurate and that all statements are capable of being verified.
- Complaints processes are outlined on the [NHMRC website](#). All complaints to NHMRC relating to the peer review process are dealt with independently and impartially.

Transparency

- NHMRC will publish key dates, all relevant material for applicants and peer reviewers, and grant announcements on its website and/or via [GrantConnect](#).
- NHMRC publicly recognises the contribution of participants in the peer review process, through publishing their names on the NHMRC website.¹

Independence

- Peer reviewers must provide independent and impartial assessment of applications. Peer reviewer assessments may be informed by input from other experts (e.g. in panel meetings or when considering expert reports) but must not be unduly influenced by the views of other researchers or stakeholders.
- The order of merit determined by peer reviewers is not altered by NHMRC. However, additional applications may be funded 'below the funding line' in priority or strategic areas.

Appropriateness and balance

- Peer reviewers are selected to meet the scheme's objectives and to ensure adequate expertise to assess the applications received.
- NHMRC endeavours to ensure that peer reviewers are selected with regard to an appropriate representation of gender, geography and large and small institutions.

¹ Such information will be in a form that prevents applicants determining which particular experts were involved in the review of their application.

Confidentiality

- NHMRC provides a process by which applications are considered by peer reviewers in-confidence. In addition NHMRC is bound by the provisions of the *Privacy Act 1988* in relation to its collections and use of personal information, and by the commercial confidentiality requirements under section 80 of the NHMRC Act.
- Peer reviewers are to treat applications in-confidence and must not disclose any matter regarding applications under review to people who are not part of the process.
- Any information or documents made available to peer reviewers in the peer review process are confidential and must not be used other than to fulfil their role.
- NHMRC is subject to the *Freedom of Information Act 1982* which provides a statutory right for an individual to seek access to documents. If documents that deal with peer review fall within the scope of a request, there is a process for consultation and there are exemptions from release. NHMRC will endeavour to protect the identity of peer reviewers assigned to a particular application.

Impartiality

- Peer reviewers must disclose all interests and matters that may, or may be perceived to, affect objectivity in considering particular applications.
- Peer reviewers must disclose interests with applications being reviewed, including:
 - research collaborations
 - student, teacher or mentoring relationships
 - employment arrangements
 - any other relationship that may, or may be seen to, undermine fair and impartial judgement.
- Disclosures of interest are managed to ensure that no one with a high conflict is involved in the assessment of relevant applications.

Quality and Excellence

- NHMRC will continue to introduce evidence-based improvements into its peer review processes.
- Any significant change will be developed in consultation with the research community and may involve piloting new processes.
- NHMRC will strive to introduce new technologies that are demonstrated to maximise the benefits of peer review and improve the efficiency and effectiveness of the process while minimising individual workloads.
- NHMRC will undertake post-scheme assessment of all its schemes with feedback from the sector.
- NHMRC will provide advice, training and feedback for peer reviewers new to NHMRC peer review.
- Where NHMRC finds peer reviewers to be substandard in their performance, NHMRC may provide such feedback directly to the peer reviewer or their institution.

Appendix B. Guidance for declaring and assessing disclosures of interest

Peer reviewers are required to disclose all interests that are relevant, or could appear to be relevant, to the proposed research.

An interest is a collaboration or relationship which may, or could be perceived to, affect impartial peer review and thus needs to be disclosed and transparently managed (where necessary) to safeguard the integrity of the peer review process. It is essential that peer reviewers not only disclose their own actual interests relating to proposed research (real interest), but also collaborations and relationships that could be perceived by stakeholders to affect impartial peer review (perceived interest). Failure to do so without a reasonable excuse may result in the peer reviewer being removed from the peer review process in accordance with subsection 44B (3) of the NHMRC Act.

A disclosure does not always equate to a conflict of interest (CoI). In determining if an interest is a conflict, peer reviewers should give consideration to the following values that underpin the robust nature of peer review:

- **Impartiality:** The benefits of peer reviewers' expert advice needs to be balanced with the risk of real or perceived interests affecting an impartial review.
- **Significance:** Not all interests are equal. The type of interest needs to be considered in terms of its significance and time when it occurred.
- **Integrity through disclosure:** Peer review rests on the integrity of peer reviewers to disclose any interests and contribute to transparently managing any real or perceived conflicts in a rigorous way. The peer review system cannot be effective without trusting peer reviewers' integrity.

In determining if an interest is a 'High', 'Low', or 'No' conflict, the responsibility is on the peer reviewer to consider the specific circumstances of the situation. This includes:

- the interest's significance
- its impact on the impartiality of the reviewer, and
- maintaining the integrity of the peer review process.

Once a peer reviewer discloses an interest they can provide an explanation of the interest in Sapphire to enable a judgement of its significance. Wherever possible, peer reviewers are required to provide sufficient detail in the explanation, such as date (month and year) and nature of the interest.

The written declaration of interest is retained for auditing purposes by NHMRC. The details below provide general examples and are not to be regarded as a prescriptive checklist.

HIGH Conflict of Interest

Situation

Example

Associated with application and/or Chief Investigator (CI)

- ✓ Peer reviewer is a CI on the application under review.
- ✓ Peer reviewer has had discussions/significant input into the study design or research proposal of this application.

Collaborations

- ✓ Peer reviewer is actively collaborating or has collaborated with the CI or in the last three calendar years on publications (co-authorship), pending grant applications and/or existing grants.

Working relationships

- ✓ Peer reviewer and a CI currently work or are negotiating future employment in the same:
 - ✓ research field at an independent Medical Research Institute.
 - ✓ Department or School of a University.
 - ✓ Department of a hospital.
- ✓ Peer reviewer is in a position of influence within the same organisation as a CI, or has a pecuniary interest in the organisation (either perceived or real) e.g. Dean of Faculty or School/Institute Director.
- ✓ Peer reviewer and a CI are on the same committee/board and the peer reviewer, or their affiliated organisation would stand to benefit from, or be affected, by the outcome of the application (i.e. vested interested in the proposed research). For example, peer reviewer and CI/Primary Supervisor are both on the same governing board within their organisation.

Professional relationships and interests

- ✓ Peer reviewer or a peer reviewer's employer is directly affiliated or associated with an organisation(s) that may have, or may be perceived to have, a vested interest in the research. For example, a pharmaceutical company, which has provided drugs for testing, has a vested interest in the outcome.

Social relationship and/or interests

- ✓ The peer reviewer or a peer reviewer's immediate family member has a personal or social relationship with a CI on the application.

Teaching or supervisory relationship

- ✓ Peer reviewer has taught or supervised a CI for either undergraduate or postgraduate studies within the last three years.
- ✓ Peer reviewer and a CI co-supervise an undergraduate or postgraduate student and collaborate with each other on the student's research.

Direct financial interest in the application

- ✓ Peer reviewer has the potential for financial gain if the application is successful, such as benefits from: payments from resulting patents, supply of goods and services, access to facilities, and provision of cells/animals as part of the collaboration.
- ✓ Peer reviewer receives research funding or other support from a company and the research proposal may involve collaboration/association with that company.
- ✓ Peer reviewer receives research funding or other support from a company and the research proposal may affect the company.

Other interests or situations

- ✓ Peer reviewer had or has an ongoing scientific disagreement and/or dispute with a CI. This may still be ruled as a high conflict if the events in question occurred beyond the last three years.
- ✓ There are other interests or situations not covered above that could influence/or be perceived to influence the peer review process. In these instances, sufficient details must be provided to allow NHMRC to make a ruling.

LOW Conflict of Interest

Situation

Example

Collaborations

- ✓ Peer reviewer and a CI on the application have collaborated more than three years ago.
- ✓ Within the last three years, the peer reviewer was part of large collaborations involving the CI, but did not interact or collaborate with the CI directly.
Examples include:
 - ✓ publication(s) as part of a multi-author collaborative team (i.e. ≥ 10 authors)
 - ✓ pending grant applications or existing grants involving more than ten CIs (e.g. large collaborative research centres and network grants)
 - ✓ A colleague is planning future collaborations with a CI.
- ✓ Peer reviewer and a named AI on the application are actively collaborating or have previously collaborated within the last three years.
- ✓ Without financial gain or exchange, a peer reviewer and a member of the research team have shared cells/animals/reagents/specialist expertise (biostatistician) etc. but have no other connection to each other.
- ✓ Collaboration between a peer reviewer's colleague/research group and a CI on the application, where the peer reviewer did not participate or have a perceived interest (e.g. direct leadership or responsibility for the researchers involved in the collaboration) in the collaboration, or vice versa.
- ✓ Peer reviewer is considering, planning or has planned a future collaboration with a CI on the application but has no current collaborations, including joint publications/applications under development.
- ✓ Peer reviewer and CI have previously proposed or planned a collaboration that did not progress.

Working relationships

- ✓ Peer reviewer and a CI currently work or are negotiating future employment in:
 - ✓ the same institution but have no direct association or collaboration.
 - ✓ the same Faculty or College of a university but in different Schools or Departments and do not know each other.
- ✓ Peer reviewer and a CI work for two organisations that are affiliated but there is no direct association/collaboration.
- ✓ Peer reviewer and a CI are on the same committee/board, but otherwise have no working or social relationships that constitute a high conflict and the peer reviewer or their affiliated organisation would not benefit from, or be affected by, the outcome of the application (i.e. do not have a vested interest in the proposed research). For example, the peer reviewer and CI are both on an

external government advisory committee.

Professional relationships and interests

- ✓ Peer reviewer and CI's organisations are affiliated but there is no direct association/collaboration between the CI and peer reviewer and there is no other link that would constitute a high conflict.

Social relationship and/or interests

- ✓ Peer reviewer's partner or immediate family member has a known personal/social (non-work) or perceived relationship with a CI on the application, but the peer reviewer themselves does not have any link with the CI that would be perceived or constitute a high conflict.

Teaching or supervisory relationship

- ✓ Peer reviewer taught or supervised the CI for either undergraduate or postgraduate studies, co-supervised a CI or the peer reviewer's research was supervised by a CI, more than three years ago.
- ✓ Peer reviewer and a CI are co-supervisors of an undergraduate or postgraduate student, but they are not collaborating with each other on the student's research (e.g. where one of the supervisors may provide additional expert input or guidance to the student's project or thesis).

Financial interest in the application

- ✓ Peer reviewer has an associated patent pending, supplied goods and services, improved access to facilities, or provided cells/animals etc. to a named CI for either undergraduate or postgraduate studies.
- ✓ Peer reviewer has intellectual property that is being commercialised by an affiliated institution. Peer reviewer has previously provided and/or received cells/animals to/from a CI on the application, but has no other financial interests directly relating to this application that would constitute a high conflict.

Other interests or situations

- ✓ Peer reviewer may be, or may be perceived to be, biased in their review of the application. For example, peer reviewer is a lobbyist on an issue related to the application.

Appendix C. Investigator Grants 2024 assessment criteria

Applications for Investigator Grants 2024 are assessed by peer reviewers on the extent to which they address the assessment criteria:

- Track record, relative to opportunity (70%), including selected Level
- Knowledge gain (30%).

Applications will be assessed against the score descriptors at Appendix D.

Track record

NHMRC defines 'track record' for the Investigator Grant scheme as the value of an individual's past research achievements, relative to opportunity, not prospective achievements, using evidence. Assessment of track record comprises peer reviewers' consideration of:

Criteria	Weighting	Assessment timeframe
Publications	35%	Past 10 years, taking into account career disruption
Research impact	20%	Research impact is expected to be recent, whereas the research program underpinning the impact has no limit
Leadership	15%	Past 10 years, taking into account career disruption

Track records are assessed relative to opportunity, taking into consideration selected Level and any career disruptions, where applicable (see Appendix H).

Where there is an eligible career disruption, applicants may include publications and Leadership track record information immediately preceding the 10-year time period up to the application close date for the timeframe commensurate to the period of their career disruption. For example, if an applicant has a 90-day career disruption, they may include publications and/or Leadership track record information during the 3 months preceding the 10 years up to the application close date. **Only** eligible career disruptions will extend the 10-year timeframe for assessing Publications and Leadership track records.

Track record information provided from outside of the allowable 10-year time frame (taking into account any career disruptions) **must not** be considered by peer reviewers in their assessments. However, while it is expected that the Research Impact will be recent, the **research program** which underscores the Research Impact can be drawn from any time in the researcher's career.

NHMRC recognises 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 will be considered when assessing research output and track record.

To further support NHMRC's objective that all applicants are assessed relative to opportunity, the *Relative to Opportunity Policy* ([Appendix H](#)) was updated for the Investigator Grants 2021 funding round. This update broadened the scope of circumstances considered during relative to opportunity assessment, ensuring that each applicant's track record and associated productivity

are considered in the context of their specific career circumstances.

1. *Publications*

Applicants have been asked to nominate up to 10 of their best publications from the past 10 years (taking into account any career disruptions). Each nominated publication has an accompanying explanation field which the applicant uses to provide their reasons for nominating the publication. Peer reviewers are to assess nominated publications on their quality and contribution to science, including the applicant's contribution to each.

Applicants have been advised that they may include field weighted metrics and citation metrics within the explanation field for the 10 best publications from the last 10 years. However, the explanation field is not to be used by the applicant to provide additional track record information (for example, conference participation, awards, patents, publications not already nominated in the applicant's Top 10). Peer reviewers **must not** take into consideration for their assessment, any additional track record information provided in the publication explanation field.

NHMRC accepts 10 types of publication: Accepted for Publication; Books/Chapters; Editorials; Journal Articles (Original Research); Journal Articles (Review); Letters to the Editor; Preprints; Research Report - commissioned by Government, Industry or Other; Technical Report; and Text Book.

A preprint is a complete and public draft of a scientific document, yet to be certified by a journal through peer review.

To be considered in this category, a preprint:

- must be available in a recognised scientific public archive or repository such as arXiv, bioRxiv, Peer J Preprints, medRxiv, etc.
- should be uniquely identifiable via a digital object identifier (DOI). For preprints that are incrementally updated as work progresses, each version should have a unique DOI and only the latest version of the work should be included in the grant application.

Assessment of publications will use a 7-point scoring system, supported by score descriptors (see **Table 1** of [Appendix D](#)). Peer reviewers will be required to use their best judgement in providing fair and consistent review of up to 10 of the applicant's nominated publications from the past 10 years (taking into account career disruptions), including the applicant explanation for each nominated publication.

The focus on up to 10 nominated publications, rather than the applicant's total list of publications from the past 10 years, is to ensure emphasis of the publications track record assessment is on the quality and contribution to science, including the applicant's contribution, rather than quantity of publications.

2. Research impact

Assessment of an applicant's research impact will be based on:

- i. the reach and significance of their claimed research impact (7%)
- ii. the contribution of their research program to the research impact (6%)
- iii. the contribution of the applicant to the research program (7%).

These 3 components of research impact are assessed separately using 3 7-point scoring systems supported by score descriptors at **Tables 2, 3** and **4** of Appendix D.

For the assessment of 'reach and significance', the 7-point scoring system is further divided for Emerging Leadership and Leadership applicants (**Table 5** of Appendix D). This is to recognise that early and mid-career researchers will have had less time to accumulate research impact.

NHMRC defines the impact of research as the verifiable outcomes that research makes to knowledge, health, the economy and/or society. Impact is the effect of the research after it has been adopted, adapted for use, or used to inform further research.

Research impact is the verifiable outcomes from research and *not the prospective or anticipated effects of the research*. For example, a prospective publication linked to the applicant's research program is not demonstrated or corroborated impact.

Research impact also includes research that leads to a decision not to use a particular diagnostic, treatment or health policy.

Table 1: Key definitions for the assessment of research impact

<p>Research impact</p> <p>The verifiable outcomes that research makes to knowledge, health, the economy and/or society. Impact is the effect of the research after it has been adopted, adapted for use, or used to inform further research.</p> <hr/>
<p>Research program</p> <p>A cohesive body of research by the applicant, not limited to an individual case study (as used in a clinical context) or a single publication. It may be recent or in the past.</p> <hr/>
<p>Research program's contribution to the research impact</p> <p>The degree to which the applicant's research program was necessary to achieve the impact(s) (knowledge, health, economic, and/or social impact).</p> <hr/>
<p>Applicant's contribution to the research program</p> <p>The level of the applicant's contribution (for example, leadership, intellectual and/or technical input) to the research program.</p>

Peer reviewers should consider, based on the corroborating evidence provided:

- the reach of the research impact
- the significance of the research impact in:

- informing knowledge to advance research
- improving products, processes, behaviours/prevention, policies, practices
- improving the nation's economic performance
- improving the health and well-being of the community.

For the purposes of assessing impact, NHMRC uses 4 specific descriptors:

- **Knowledge impact** – Research that has contributed to discoveries and/or demonstrable benefits emerging from adoption, adaptation or use of the discovery to inform further research.
- **Health impact** – Research that has contributed to improvements in health through new therapeutics, diagnostics, or disease prevention; or by contributing to improvements in disease prevention, diagnosis and treatment, health policy, health systems, and quality of life.
- **Economic impact** – Research that has contributed to the economic performance of the nation in which the research program was conducted, and/or for which the impact was intended, by creating new industries, jobs and valuable products, and reducing health care costs. An economic impact may also contribute to social or health impacts, including human capital gains and the value of life and health.
- **Social impact** – Research that has contributed to improvements in the health of the society, including the well-being of the end user and the community. This may include improved ability to access health care services and to participate socially.

Peer reviewers should note that applicants can demonstrate the contribution of their research program within a single category of impact (knowledge, health, economic and social) or across multiple categories. As one research program may result in multiple impact types, peer reviewers should refer to the definitions of the 4 impact types when assessing claims. If impacts from one research program are claimed across multiple categories, the overall research impact score is determined holistically and on balance across the different categories (it is not additive).

For applicants who have provided impacts for **more than one research program**, peer reviewers are to determine whether **any** one of the research programs and their impacts have been sufficiently demonstrated and corroborated, and score accordingly. Applicants are not to be scored in an additive method for multiple research programs.

Reach is the extent, spread, breadth, and/or diversity of the beneficiaries of the impact, relative to the type of research impact.

Significance is the degree to which the impact has enabled, enriched, influenced, informed or changed the performance of policies, practices, products, services, culture, understanding, awareness or well-being of the beneficiaries (not the prevalence or magnitude of the issue).

Applicants were instructed to include **one research program** to demonstrate research impact(s) across one or more of the 4 types of impact. A research program is a cohesive body of research by the applicant, as opposed to disparate bodies of research that each have different objectives and impacts. It is not limited to an individual case study (as used in a clinical context) or a single publication. A research program may be recent or in the past.

Applicants need to outline the research program with corroborating evidence that can be independently assessed by peer reviewers. Applicants were required to provide evidence sufficient and strong enough to demonstrate their claims for all 3 impact criteria. Applicants may use the same evidence across the 3 impact criteria if appropriate. Peer reviewers will need to

decide whether the impact claims have been sufficiently demonstrated and corroborated. A poorly corroborated or non-corroborated research impact or contribution to impact should receive a score of one, in alignment with the score descriptors.

Peer reviewers should consider the degree to which the applicant's research program was necessary to achieve the impact(s) (knowledge, health, economic, and/or social impact) based on robust and verifiable evidence. The relationship between the applicant's research program (including related activities) and the impact may be foreseen or unforeseen and may be an end product or demonstrated during the research process. Research impact examples may include the adoption or adaptation of existing research.

While it is expected that the research impact be recent, the research program that underscores it may be from any time in the researcher's career. Peer reviewers are not to consider the timing/recency of the **research program** in their assessment.

Relative to opportunity and to the applicant's field of research, peer reviewers should consider the level of the applicant's contribution (for example, leadership, intellectual and/or technical input) to the research program based on robust and verifiable evidence.

Verification of evidence provided against research impact claims

Peer reviewers **can verify evidence provided by applicants**. If an applicant has not provided evidence of their research impact, they should receive a score of one, in alignment with the score descriptors. Peer reviewers **must not seek evidence** to support the research impact claims of an applicant who has not provided evidence.

Peer reviewers should also note that, for corroborating evidence, it is the quality of the evidence provided, not the quantity, that should be considered. Applicants only need to provide evidence sufficient and strong enough to verify the claims, not all evidence that may be on the public record. A poorly or non-corroborated research contribution should receive a score of one, in alignment with the score descriptors at **Tables 2, 3 and 4** of [Appendix D](#).

Examples of evidence are listed in **Table 1** below. Evidence examples may be relevant to more than one research impact type.

Table 2: Types of research impact and examples of evidence of research impact

Type of impact	Description of research impact	Examples of evidence (not exhaustive)
Knowledge impact	New knowledge, demonstrating the benefits emerging from adoption, adaptation or use of new knowledge to inform further research, and/or understanding of what is effective.	<ul style="list-style-type: none"> • recognition of research publications • (for example, citation metrics, particularly field weighted) • data sharing • contribution to registries or biobanks • prizes and conference presentations • uptake of research tools and techniques • evidence of uptake of the research by other disciplines
Health impact	Improvements in health through new therapeutics, diagnostics, disease prevention or changes in behaviour; or improvements in disease prevention, diagnosis and treatment, management of health problems, health policy, health systems, and quality of life.	<ul style="list-style-type: none"> • policy or program adopted • a clinical guideline adopted • international or national practice standards adopted • improved service effectiveness • Phase I, Phase II and Phase III clinical trials underway or completed • improved productivity due to research innovations (for example, reduced illness, injury) • Quality-Adjusted Life Years, Disability-Adjusted Life Years, Potential Years of Life Lost, Patient Reported Outcome Measure and other relevant indicators • relative stay index for multi-day stay patients, hospital standardised mortality ratio, cost per weighted separation and total case weighted separation • reports (including community and government)

Type of impact	Description of research impact	Examples of evidence (not exhaustive)
Economic impact	<p>Improvements in the economic performance of the nation in which the research program was conducted, and/or for which the impact was intended, through creation of new industries, jobs or valuable products, or reducing health care costs, improving efficiency in resource use, or improving the welfare/well-being of the population within current health system resources. An economic impact may also contribute to social or health impacts, including human capital gains and the value of life and health.</p>	<p>Health Care System Savings</p> <ul style="list-style-type: none"> • relative stay index for multi-day stay patients, hospital standardised mortality ratio, cost per weighted separation and total case weighted separation • reduction in Medicare Benefits Schedule/ Pharmaceutical Benefits Scheme costs • improved productivity due to research innovations (for example, reduced illness, injury) • improved service effectiveness <p>Product development</p> <ul style="list-style-type: none"> • a research contract with an industry partner and an active collaboration • granting of a patent • execution of a licensing agreement with an established company • income from intellectual property • raising funding from venture capital or other commercial sources or from government schemes that required industry co-participation • successful exit from start-up company (public market flotation, merger or acquisition) • development of pre-good manufacturing practice prototype • successful generation or submission of: <ul style="list-style-type: none"> – a regulatory standard data set – applications for pre-market approval of a medical device – a new drug or device for registration (for example, by Food and Drug Administration, European Medicines Agency, Therapeutic Goods Administration) • product sales
Social impact	<p>Improvements in the health of society, including the well-being of the end user and the community. This may include improved ability to access health care services, to participate socially (including empowerment and participation in decision making) and to quantify improvements in the health of society.</p>	<ul style="list-style-type: none"> • uptake or demonstrated use of evidence by decision makers/policy makers • qualitative measures demonstrating changes in behaviours, attitudes, improved social equity, inclusion or cohesion • improved environmental determinants of health • improved social determinants of health • changes to health risk factors

3. Leadership

For the assessment of Leadership, peer reviewers are required to review demonstrated applicant examples from the past 10 years (taking into account career disruptions) across each of the 4 Leadership elements:

- Research Mentoring (examples may be drawn from):
 - Formal and informal stewardship of the next generation of researchers
 - identifying, training and nurturing talent
 - fostering collaboration among junior researchers
- Research Policy and Professional Leadership (examples may be drawn from):
 - improving research quality standards
 - driving innovation and multi-dimensionality in research
 - improving academic reporting standards
- Institutional Leadership (examples may be drawn from):
 - driving behavioural and cultural change
 - identifying and mitigating risks
- Research Programs and Team Leadership (examples may be drawn from):
 - creating diverse, inclusive, and collaborative learning environments
 - engagement with the broader community and public advocacy
 - providing opportunities for appropriate research and non-research training.

NHMRC recognises that a broad range of leadership contributions are necessary to create an environment that enables research excellence and stewardship, and that based on a researcher's working environment, work history and level of seniority, examples of leadership will vary. The examples listed under each Leadership element above are illustrative only, applicants have been encouraged to demonstrate their strongest examples of leadership.

Applicants have been encouraged to highlight their leadership style and describe how they have identified and contributed to positive change (for example, organisational or behavioural/cultural change). Peer reviewers are to assess demonstrated impacts of leadership, such as people development, stewardship, contributions to cultural or paradigm change and fostering equality, diversity and inclusion, against the score descriptors at [Appendix D](#).

Peer reviewers should ignore Leadership track record information that falls outside of the past 10 years (taking into account career disruptions). Applicants have been advised not to provide Leadership track record information that carries over the allowable 10-year timeframe. However, where applicants *do* list Leadership track record information that carries across the 10-year timeframe (for example, "I have mentored 20 students since 2003"), peer reviewers should use their judgement in determining what subset of that Leadership track record information to consider in their assessment. In the above example, reviewers might decide to reduce the number of claimed students mentored in proportion to how much additional time was being claimed (that is, halve the number of students mentored to 10, as the time period claimed was double the allowable 10 years).

The assessment of Leadership will be against the score descriptors at **Table 5** of [Appendix D](#).

Track records are assessed relative to opportunity, taking into consideration selected Level and any career disruptions, where applicable (see [Appendix H](#)).

Knowledge gain

NHMRC defines 'knowledge gain' for the Investigator Grant scheme as the quality of the proposed research and significance of the knowledge gained. It incorporates theoretical concepts, hypothesis, research design, robustness and the extent to which the research findings will contribute to the research area and health outcomes (by advancing knowledge, practice or policy). In their response to the knowledge gain criteria, applicants were asked to:

- describe their research vision for the next 5 years
- outline the proposed research objectives, basic methodologies and expected outcomes
- describe the importance of the problem to be researched, the planned outcome of the research plan, and the potential significance of the research
- describe the support for their proposed research (for example, access to technical resources, infrastructure, equipment and facilities, and if required, access to additional expertise and funding necessary to achieve proposed outcomes).

For the assessment of 'knowledge gain' peer reviewers are to consider:

- the clarity and justification of the research hypotheses/rationale
- the strengths and weaknesses of the scientific framework, study design, methods and analyses
- whether the proposal tackles a major question addressing an issue of critical importance to advance the research or health area (not prevalence or magnitude of issue)
- the access to the technical resources, infrastructure, equipment and facilities, and if required, access to additional expertise and funding necessary to achieve the proposed outcomes
- the potential for significant and transformative changes/outcomes in the scientific knowledge, practice or policy underpinning human health issues
- the potential research outputs including: intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing etc.

Reviewers are to consider all of the proposed research described in the 5-year research vision when assessing knowledge gain, irrespective of whether any part of the research plan has already obtained funding. While applicants are not required to provide a line-by-line budget with accompanying justifications, they have been asked to describe any additional resources required to achieve the proposed outcomes (where research described in the 5-year vision could not be funded by the Investigator Grant). This is intended to assist reviewers in considering the feasibility of the research outlined in the 5-year vision.

Peer reviewers are to make no distinction in their assessments of the 5-year research vision/plan, between applicants who have held, or currently hold an Investigator Grant, and applicants who have not. Your assessment is of the **prospective** research outlined in the research vision/plan.

The significance of the study is not a measure of the prevalence/incidence of the health issue (for example, cancer versus sudden infant death syndrome) but the extent to which the study will address the health issue.

The knowledge gain must be relevant to Australia and Australian health, but it is not a requirement for all research outlined in the research vision/ plan to occur in Australia (see [NHMRC Direct research costs guidelines](#)). NHMRC encourages international collaboration in health and medical research to contribute to global health, achieve better outcomes for the Australian community and build Australia's research capability (see [NHMRC International Engagement Strategy](#)). Score descriptors for knowledge gain are at **Table 6** of [Appendix D](#).

Appendix D. Investigator Grants 2024 score descriptors

The following score descriptors are used as a guide to scoring an application against each of the assessment criteria.

While the score descriptors provide peer reviewers with some benchmarks for appropriately scoring each application, **it is not essential that all descriptors relating to a given score are met.**

The score descriptors are a guide to a 'best fit' outcome. Peer reviewers will consistently refer to these score descriptors to ensure thorough, equitable and transparent assessment of applications.

Assessing Aboriginal and Torres Strait Islander contributions

NHMRC recognises that Aboriginal and Torres Strait Islander applicants 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.

Track record, relative to opportunity (70%), including selected Level

Publications (35%)

Publication assessment will focus on up to 10 of the applicant's top publications in the past 10 years (taking into account career disruptions), supported by applicant explanations for each nominated publication. Assessment of publication track record will focus on the quality of the research and contribution to science rather than the quantity of publications.

Table 1: Publications

Descriptor	Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates a(n) [performance indicator] record of publications in terms of quality and contribution to science						
Score	1	2	3	4	5	6	7
Performance Indicator	Weak or limited	Satisfactory	Good	Very Good	Excellent	Outstanding	Exceptional

Research impact (20%)

Table 2: Reach and significance of the research impact (Emerging Leadership and Leadership) (7%)¹

Emerging Leadership score	Score descriptors			Leadership score
	<i>There is robust, verifiable evidence of:</i>	<i>Note: Applicants do not need to demonstrate all types of research impact</i>	<i>There is robust, verifiable evidence of:</i>	
7	an exceptional knowledge, health, economic and/or social impact	<p>Knowledge</p> <ul style="list-style-type: none"> a paradigm changing development that has led to (a) new knowledge within the field that is recognised across multiple countries, (b) significant influence beyond the specific field of research or (c) the development of a new field(s) of research that has been recognised across multiple countries/ beneficiaries <p>Health</p> <ul style="list-style-type: none"> a paradigm changing development that has improved health or health systems, services, policy, programs or clinical practice that (a) had a significant impact on health with an extensive reach (b) had a profound impact on health with a modest reach (c) profoundly improved the health of Australia's Indigenous people (d) led to a significant, scalable and sustainable change in health systems and services in a large number of communities <p>Economic</p> <ul style="list-style-type: none"> development of a service delivery or system change, prevention program, intervention, device, therapeutic or change in clinical practice that led to (a) the generation of significant commercial income or (b) a profound reduction in healthcare costs <p>Social</p> <ul style="list-style-type: none"> changes in policy that have had (a) a significant impact on the social well-being, equality or social inclusion of very large numbers of people at a national level or across multiple countries (b) a profound impact on the social well- 	an exceptional knowledge, health, economic and/or social impact	7
			an outstanding knowledge, health, economic and/or social impact	6

¹ For the assessment of research impact, different 7-point scales are used for Emerging Leadership and Leadership applicants. This is to recognise that early and mid-career researchers will have had less time to accumulate research impact than more senior researchers.

Emerging Leadership score	Score descriptors			Leadership score
	<i>There is robust, verifiable evidence of:</i>	<i>Note: Applicants do not need to demonstrate all types of research impact</i>	<i>There is robust, verifiable evidence of:</i>	
		being of the end-user, public and community of a smaller number of individuals at a national level or across multiple countries		
7	an exceptional knowledge, health, economic and/or social impact	Knowledge <ul style="list-style-type: none"> a major development that has led to (a) new knowledge within the field that is recognised nationally or across multiple countries, (b) a major influence beyond the specific field of research or (c) a major influence on the development of a new field(s) of research that has been recognised nationally or across multiple countries/beneficiaries 	an excellent knowledge, health, economic and/or social impact	5
6	an outstanding knowledge, health, economic and/or social impact	Health <ul style="list-style-type: none"> an important development that has improved health or health systems, services, policy, programs or clinical practice that (a) had a major impact on health with an extensive reach, (b) had a significant impact on health with a modest reach, (c) led to a significant improvement in the health of Australia's Indigenous people or (d) led to major scalable and sustainable change in health systems and services in a number of communities Economic <ul style="list-style-type: none"> development of a service delivery or system change, prevention program, intervention, device, therapeutic or change in clinical practice that led to (a) the generation of considerable commercial income or (b) a major reduction in healthcare costs Social <ul style="list-style-type: none"> changes in policy that have either had (a) a major impact on the social well-being, equality or social inclusion of very large numbers of people at a local, state/territory or national level or (b) a significant impact on the social well-being of the end-user, public and community of a smaller number of individuals at a local, state/territory or national level 	a very good knowledge, health, economic and/or social impact	4
5	an excellent knowledge, health, economic and/or social impact	Knowledge <ul style="list-style-type: none"> a change that has led to (a) new knowledge within the field that is recognised nationally or across multiple countries, (b) had some influence beyond the 	a good knowledge, health, economic and/or social impact	3

Emerging Leadership score	Score descriptors			Leadership score
	<i>There is robust, verifiable evidence of:</i>	<i>Note: Applicants do not need to demonstrate all types of research impact</i>	<i>There is robust, verifiable evidence of:</i>	
4	a very good knowledge, health, economic and/or social impact	specific field of research, or (c) some influence on the development of a new field(s) of research that has been recognised nationally or across multiple countries/beneficiaries		
3	a good knowledge, health, economic and/or social impact	<p>Health</p> <ul style="list-style-type: none"> a development that has improved health or health systems, services, policy, programs or clinical practice that (a) had some impact on health with an extensive reach, (b) had a major impact on health with a modest reach, (c) led to a major improvement in the health of Australia's Indigenous people, or (d) led to some scalable and sustainable change in health systems and services in a small number of communities 		
2	a satisfactory knowledge, health, economic and/or social impact	<p>Economic</p> <ul style="list-style-type: none"> development of a service delivery or system change, prevention program, intervention, device, therapeutic or change in clinical practice that led to (a) the generation of some commercial income or (b) some reduction in healthcare costs <p>Social</p> <ul style="list-style-type: none"> changes in policy that have had (a) some impact on the social well-being, equality or social inclusion of very large numbers of people at a local, state/territory or national level or (b) an impact on the social well-being of the end-user, public and community of a smaller number of individuals at a local, state/territory or national level 	a satisfactory knowledge, health, economic and/or social impact	2
1	a weak or limited knowledge, health, economic and/or social impact and/or the applicant has not supplied robust verifiable evidence	<p><i>There is limited or weak evidence of:</i></p> <ul style="list-style-type: none"> the development of new knowledge improved health systems and services reductions in health care costs or economic growth improvements in social well-being, equality or social inclusion. 	a weak or limited knowledge, health, economic and/or social impact and/or the applicant has not supplied robust verifiable evidence	1

Table 3: Research program’s contribution to the research impact (6%)

Descriptor	Relative to opportunity and to their field of research, there is robust verifiable evidence that the applicant’s research program made a(n) [performance indicator] contribution to the knowledge, health, economic and/or social impact						
Score	1	2	3	4	5	6	7
Performance Indicator	Weak, limited or no	Satisfactory	Good	Very Good	Excellent	Outstanding	Exceptional

Note: Applicants that do not supply robust verifiable evidence should receive a score of 1.

Table 4: Applicant’s contribution to research program (7%)

Descriptor	Relative to opportunity and to their field, there is robust verifiable evidence that the applicant made a(n) [performance indicator] contribution to the research program that led to a knowledge, health, economic and/or social impact						
Score	1	2	3	4	5	6	7
Performance Indicator	Weak, limited or no	Satisfactory	Good	Very Good	Excellent	Outstanding	Exceptional

Note: Applicants that do not supply robust verifiable evidence should receive a score of 1.

Leadership (15%)

Table 5: Leadership

Descriptor	<p>Relative to opportunity (including career stage) and to their field of research, the applicant demonstrates [performance indicator] performance in:</p> <ul style="list-style-type: none"> • supervision, mentoring, training and/or career development of staff and/or students within and/or beyond their research group • experience and contribution to the peer review of publications and grant applications, nationally and/or internationally • contribution to community engagement, public advocacy, government advisory boards or committees, professional societies at a local, national and/or international level • non-research contribution(s) to department, centre, institute or organisation for example, people development, relationship building, stewardship, teaching, mentoring, contributions towards improving equity and diversity, behaviour and culture • conception and direction of a research project or program • building and maintaining collaborative networks necessary to achieve research outcomes within and/or beyond their institution. 						
Score	1	2	3	4	5	6	7
Performance Indicator	Weak or limited	Satisfactory	Good	Very Good	Excellent	Outstanding	Exceptional

Knowledge gain (30%)

Table 6: Knowledge gain

Score	Performance indicator	Score descriptors
7	Exceptional	<p>The proposed research:</p> <ul style="list-style-type: none"> • is supported by an extremely well justified and reasoned hypothesis/ rationale • has a scientific framework, design, methods and analyses that are flawless, highly developed and highly appropriate • demonstrates to an extremely high level that it addresses an issue of critical importance to advance the research or health area (not prevalence or magnitude of the issue) • has or has access to exceptional technical resources, infrastructure, equipment and facilities, and if required, has access to exceptional additional expertise and funding necessary to achieve proposed outcomes • will result in extremely significant and transformative changes/ outcomes in the scientific knowledge, practice or policy underpinning human health issues • will lead to extremely significant research outputs (for example, intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing) • would be extremely competitive with the best, similar research proposals internationally.
6	Outstanding	<p>The proposed research:</p> <ul style="list-style-type: none"> • is supported by a very well justified and reasoned hypothesis/rationale • has a scientific framework, design, methods and analyses that are well developed and highly appropriate with only a few minor weaknesses • demonstrates to a very high level that it addresses an issue that is very important to advance the research or health area (not prevalence or magnitude of the issue) • has or has access to outstanding technical resources, infrastructure, equipment and facilities, and if required, has access to outstanding additional expertise and funding necessary to achieve proposed outcomes • will result in very highly significant and substantial changes/outcomes in the scientific knowledge, practice or policy underpinning human health issues • will lead to very highly significant research outputs (for example, intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing) • would be highly competitive with the best, similar research proposals internationally.

Score	Performance indicator	Score descriptors
5	Excellent	<p>The proposed research:</p> <ul style="list-style-type: none"> • is supported by a well justified and reasoned hypothesis/rationale • has a scientific framework, design, methods and analyses that are well developed and highly appropriate with several minor weaknesses • demonstrates to a high level that it addresses an issue that is of considerable importance to advance the research or health area (not prevalence or magnitude of the issue) • has or has access to excellent technical resources, infrastructure, equipment and facilities, and if required, has access to excellent additional expertise and funding necessary to achieve proposed outcomes • will result in highly significant and substantial changes/outcomes in the scientific knowledge, practice or policy underpinning human health issues • will lead to highly significant research outputs (for example, intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing) • would be competitive with the best, similar research proposals internationally.
4	Very good	<p>The proposed research:</p> <ul style="list-style-type: none"> • is supported by a well justified and reasoned hypothesis/rationale • has a scientific framework, design, methods and analyses that are well developed and highly appropriate with a few minor concerns • demonstrates that it addresses an issue that is of importance to advance the research or health area (not prevalence or magnitude of the issue) • has or has access to very good technical resources, infrastructure, equipment and facilities, and if required, has access to very good additional expertise and funding necessary to achieve proposed outcomes • is likely to result in significant and substantial changes/outcomes in the scientific knowledge, practice or policy underpinning human health issue • is likely to lead to significant research outputs (for example, intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing) • would likely be competitive with high quality, similar research proposals internationally.

Score	Performance indicator	Score descriptors
3	Good	<p>The proposed research:</p> <ul style="list-style-type: none"> • is supported by a justified and sound hypothesis/rationale • has a scientific framework, design, methods and analyses that are developed and appropriate with several minor concerns • demonstrates that it is addressing an issue that is of some importance to advance the research or health area (not prevalence or magnitude of the issue) • has or has access to good technical resources, infrastructure, equipment and facilities, and if required, has access to good additional expertise and funding necessary to achieve proposed outcomes • could result in significant and substantial changes/outcomes in the scientific knowledge, practice or policy underpinning human health issues • could lead to significant research outputs (for example, intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing) • would be somewhat competitive with high quality, similar research proposals internationally.
2	Satisfactory	<p>The proposed research:</p> <ul style="list-style-type: none"> • is supported by a reasoned hypothesis/ rationale • has a scientific framework, design, methods and analyses that are generally sound but may lack clarity in some aspects and/or may contain notable weaknesses/ concerns • demonstrates that it is addressing an issue that is of marginal importance to advance the research or health area (not prevalence or magnitude of the issue) • has or has access to some/ most but not all of the technical resources, infrastructure, equipment and facilities, and if required, has access to some/ most but not all of the additional expertise and funding necessary to achieve proposed outcomes • could result in appreciable improvements/outcomes in the scientific knowledge, practice or policy underpinning human health issues • could lead to moderately significant research outputs (for example, intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing) • would be marginally competitive with high quality, similar research proposals internationally.

Score	Performance indicator	Score descriptors
1	Marginal to poor	<p>The proposed research:</p> <ul style="list-style-type: none"> • has a weak hypothesis/ rationale • has a scientific framework, design, methods and analyses that have significant flaws and may contain major weaknesses • demonstrates that it is addressing an issue of some concern to advance the research or health area (not prevalence or magnitude of the issue) • does not have access to the technical resources, infrastructure, equipment and facilities or access to additional expertise or funding necessary to achieve proposed outcomes (if required) • is unlikely to result in improvements/ outcomes in the scientific knowledge, practice or policy underpinning human health issues of significance • is unlikely to lead to research outputs (for example, intellectual property, publications, policy advice, products, services, teaching aids, consulting, contract research, spin-offs, licensing) of significance • is unlikely to be competitive with similar research proposals internationally.

Appendix E. Indigenous Research Excellence Criteria

To qualify as Aboriginal and Torres Strait Islander health research, at least 20% of the research effort and/or capacity building must relate to Aboriginal and Torres Strait Islander health.

Qualifying applications must address the NHMRC *Indigenous Research Excellence Criteria* as follows:

- Community engagement - the proposal demonstrates how the research and potential outcomes are a priority for Aboriginal and Torres Strait Islander communities with relevant community engagement by individuals, communities and/or organisations in conceptualisation, development and approval, data collection and management, analysis, report writing and dissemination of results.
- Benefit - the potential health benefit of the project is demonstrated by addressing an important public health issue for Aboriginal and Torres Strait Islander people. This benefit can have a single focus or affect several areas, such as knowledge, finance and policy or quality of life. The benefit may be direct and immediate, or it can be indirect, gradual and considered.
- Sustainability and transferability - the proposal demonstrates how the results of the project have the potential to lead to achievable and effective contributions to health gain for Aboriginal and Torres Strait Islander people, beyond the life of the project. This may be through sustainability in the project setting and/or transferability to other settings such as evidence based practice and/or policy. In considering this issue, the proposal should address the relationship between costs and benefits.
- Building capability - the proposal demonstrates how Aboriginal and Torres Strait Islander people, communities and researchers will develop relevant capabilities through partnerships and participation in the project.

Peer reviewers will consider these in their overall assessment of the application, when scoring the assessment criteria set out in [Appendix C](#).

Appendix F. Assessing applications against the *Indigenous Research Excellence Criteria*

Peer reviewers should consider the following when assessing applications that have a focus on the health of Indigenous Australians. The points below should be explicit throughout the application and not just addressed separately within the Indigenous criteria section.

Community engagement

- Does the proposal clearly demonstrate a thorough and culturally appropriate level of engagement with the Aboriginal and Torres Strait Islander community or health services prior to submission of the application?
- Is there clear evidence that the level of engagement throughout the project will ensure the feasibility of the proposed study?
- Has the application demonstrated evidence that any of the methods, objectives or key elements of the proposed work have been formed, influenced or defined by the community?
- Were the Indigenous community instrumental in identifying and inviting further research into the health issue and will the research outcomes directly benefit the 'named' communities?
- Is there a history of working together with the 'named' communities e.g. co-development of the grant, involvement in pilot studies or how the 'named' communities will have input/control over the research process and outcomes across the life of the project?

Benefit

- Does the proposal clearly outline the potential health benefits (both intermediate and long term, direct and indirect) to Aboriginal and Torres Strait Islander people?
- Does the proposal demonstrate that the benefit(s) of the project have been determined or guided by Aboriginal and Torres Strait Islander people, communities or organisations themselves?

Sustainability and transferability

- Does the proposal:
 - Provide a convincing argument that the outcomes will have a positive impact on the health of Aboriginal and Torres Strait Islander peoples, which can be maintained after the study has been completed?
 - Have relevance to other Indigenous communities?
 - Clearly plan for and articulate a clear approach to knowledge translation and exchange?
 - Demonstrate that the findings are likely to be taken up in health services and/or policy?
- Will the outcomes from the study make a lasting contribution to Aboriginal and Torres Strait Islander communities and their wellbeing?

Building capability

- Does the proposal outline how Aboriginal and Torres Strait Islander people and/or communities will benefit from capability development?
- Does the proposal outline how researchers and individuals/groups associated with the research project will develop capabilities that allow them to have a greater understanding/engagement of Aboriginal and Torres Strait Islander peoples?

Appendix G. Statements of Expectations

The following *Statements of Expectations* describe the typical research experience and academic level expected at each Investigator Grant Level, and are to be used as a guide for applicants when selecting the Category and Level of their Investigator Grant application.

All applicants are required to provide a justification of the selected Category and Level in the application form.

NHMRC expects that applicants will apply at an appropriate Level to help achieve parity and fairness for all Investigator Grant applicants.

Recognising the diversity of the sector and the many different settings in which researchers are employed, NHMRC recognises that individuals can achieve academic promotion for a range of reasons unrelated to their research career (for example, teaching and learning, administration, community engagement). Investigator Grant Levels are not strictly correlated with academic levels. The required justification will support assessment where applicants fall outside the broad benchmarks.

Peer reviewers will consider this justification when assessing an applicant's track record relative to opportunity. Further information on how to assess, relative to opportunity, the track records of applicants deemed to have applied at an inappropriate Level is at [Appendix G\(i\)](#).

Note: The applicant justification does not form part of the assessment of eligibility to apply at that Level.

Applicants who have previously held an NHMRC Fellowship or Investigator Grant are expected to apply at a Level commensurate with their previous or currently held Fellowships, factoring in the career progression that those grants support. Applicants are reminded that previous NHMRC Fellowships or Investigator Grants held affect eligibility to apply at some Investigator Grant Levels. Applicants who have never received an NHMRC Fellowship or Investigator Grant should refer to these expectations and apply at a Level commensurate with their experience and profile.

The descriptors provide a broad benchmark and it is not essential that all elements be met.

Statements of expectations

Leadership Level 3 (L3)

It is expected that L3 Investigator Grant recipients will typically be more than **20 years post-PhD** (or equivalent) and appointable at **Academic Level E**, and be leading international authorities in their research area with demonstrated:

- significant original contributions of major importance that have had a positive impact on health and medical research, the health system, economy and/or the health of the population
- experience in leading a major independent research program(s) involving national and international collaborative networks
- national and international contributions through leadership in their scientific discipline (for example, in research policy and on advisory committees)
- extensive supervision, mentoring and promotion of early and mid-career researchers
- significant leadership roles within their department, centre, institution or organisation, that extend beyond their research.

Leadership Level 2 (L2)

It is expected that L2 Investigator Grant recipients will typically be between **15 and 20 years post-PhD** (or equivalent) and appointable at **Academic Level D or E (or equivalent)**, and be leading national and

rising international authorities in their research area with demonstrated:

- substantial and original contributions that are of major benefit to health and medical research, the health system, economy and/or the health of the population
- experience in leading an independent research program(s) involving national collaborative networks
- national and possibly international contributions to their scientific discipline (for example, research advisory boards, peer review)
- supervision, mentoring and promotion of early and mid-career researchers
- leadership roles within their department, centre, institution or organisation that extend beyond their research.

Leadership Level 1 (L1)

It is expected that L1 Investigator Grant recipients will typically be between **10 and 15 years post-PhD** (or equivalent) and appointable at **Academic Level C or D (or equivalent)**, and be national authorities in their research area with demonstrated:

- original contributions that are of major benefit to health and medical research, the health system, economy and/or the health of the population
- ability to independently conceive and direct research programs, coordinate a team of researchers and generate national collaborations
- national contributions to their scientific discipline (for example, public advocacy, peer review, research advisory boards or professional societies)
- supervision, mentoring and promotion of early and mid-career researchers
- contribution(s) within their department, centre, institute or organisation that extend beyond their research for example, membership of regulatory or management committees

Emerging Leadership Level 2 (EL2)

It is expected that EL2 Investigator Grant recipients will typically be between **5 and 10 years post-PhD** (or equivalent) and appointable at **Academic Level B (or equivalent)**, and be recognised for their expertise in their research area with demonstrated:

- original contributions of influence in their field of expertise
- ability to contribute to the conception and direction of research projects, while developing independence
- experience in supervising a small research team
- national contributions to their scientific discipline (for example, public advocacy, community leadership, peer review and professional societies)
- contributions within their department, centre, institution or organisation for example, organising journal clubs, seminar series etc.

It is also expected that Emerging Leadership applicants will be working within a larger team under the mentorship of more senior researchers.

Emerging Leadership Level 1 (EL1)

It is expected that EL1 Investigator Grant recipients will typically be between **0 and 5 years post-PhD** (or equivalent) and will be beginning to gain recognition in their research area with demonstrated:

- original contribution(s) in their field of expertise
- ability to contribute to the conception of research projects
- scientific contributions within their region, state or territory (for example, community leadership, state level contribution to a professional society)
- limited but developing supervision of research staff and students
- contributions within their department, centre, institution or organisation for example, organising journal clubs, seminar series etc.

It is also expected that Emerging Leadership applicants will be working within a larger team under the mentorship of more senior researchers.

Guidance on relationships between NHMRC Fellowship schemes and the Investigator Grant Levels is provided in **Table 1**.

Table 1: Guidance on relationships between NHMRC Fellowship schemes and Investigator Grant Levels

Current NHMRC Fellowship	Corresponding Investigator Grant Level
Senior Principal Research Fellowship Australia Fellowship	Leadership Level 3
Principal Research Fellowship Practitioner Fellowship Level 2	Leadership Level 2
Practitioner Fellowship Level 1 Senior Research Fellowship Levels A and B Career Development Fellowship Level 2	Leadership Level 1
Career Development Fellowships Levels 1 and 2 Translation of Research into Practice (TRIP) Fellowship	Emerging Leadership Level 2
Early Career Fellowship Translation of Research into Practice (TRIP) Fellowship	Emerging Leadership Level 1

Appendix G(i). Reviewing applications submitted at an inappropriate Category/Level

Reviewers must score track record, relative to opportunity (70%), including selected Level, according to the score descriptors and taking into account the *Statements of Expectations* and the applicant's Category and Level justification. The intent of the Category and Level justification is to allow peer reviewers to make a fair comparison across a group of applicants. Where peer reviewers consider applicants have applied at an incorrect Level, they are to apply that determination to the relative to opportunity assessment of the applicant's track record against the score descriptors.

Note: Scoring of knowledge gain should not be affected because the research proposal is not assessed relative to opportunity.

All components of the track record score descriptors are to be considered relative to opportunity, including selected Level. Throughout the peer review process, the Category and Level justification must be considered against the typical elements outlined for each Investigator Grant Level within the *Statements of Expectations*, not just the expected/typical years post-PhD (or equivalent) and/or Academic Level.

For example, an applicant may be <10 years post-PhD and, due to high performance and an excellent track record, their career has progressed quickly and they have achieved Professorial Level. This applicant may apply at Emerging Leadership Level 1 (for which they are eligible) expecting to "compete" against other researchers who may be only one year post-PhD. In this instance, a peer reviewer would need to consider how the applicant's track record, relative to opportunity, aligns with the *Statements of Expectations* and, if it doesn't, whether the applicant has adequately justified the Level for which they applied. This individual may still receive a high score, but may not score as highly as someone who has achieved the same outcome in fewer years post-PhD.

NHMRC requires peer reviewers to carefully consider track record, relative to opportunity, in conjunction with the Category and Level justification provided by applicants. For example, if a Leadership Level 1 applicant's track record aligns most strongly with the *Statements of Expectations* Leadership Level 3 descriptors, and the applicant does not adequately justify their selected Level, this can be taken into account by the peer reviewer when assessing the track record, relative to opportunity.

In all cases, peer reviewers are directed to carefully assess how the applicant has presented their justification against the descriptors contained in the *Statements of Expectations*. Peer reviewers need to determine whether, in their opinion, the applicant has selected the appropriate Level, and apply that determination to the relative to opportunity assessment of the applicant's track record against the score descriptors.

Peer reviewers are also advised that when providing feedback to applicants it would be appropriate for them to indicate if the Category and Level applied for was not well justified and provide details on where the track record did not align with the *Statements of Expectations*.

Appendix H. NHMRC Relative to Opportunity policy

Purpose

NHMRC's goal is to support the highest quality research that will lead to improvements in health over the short or long term. Peer review by independent experts is used to identify well-designed feasible projects that address a significant question and are undertaken by researchers with demonstrated capacity to perform high quality research.

In most NHMRC grant schemes, peer reviewers are asked to assess the track record of the applicants as well as the proposed research. However, NHMRC recognises that not all research careers are the same and therefore peer reviewers are asked to assess track records 'relative to opportunity', taking into account circumstances that have affected the applicant's research productivity.

The purpose of this appendix is to outline NHMRC's *Relative to Opportunity Policy* with respect to:

- peer review of applicant track records
- eligibility to apply for Emerging Leadership Investigator Grants.

Policy approach

NHMRC considers 'relative to opportunity' to mean that peer reviewers should assess an applicant's track record of research productivity and professional contribution in the context of their career stage and circumstances, by taking into consideration whether the applicant's productivity and contribution are commensurate with the opportunities available to them.

The policy has 2 components:

- Career disruption – a prolonged interruption to the ability to work due to pregnancy, illness/injury and/or carer responsibilities. Career disruptions are taken into account in track record assessment and in determining an applicant's eligibility to hold an Emerging Leadership Investigator Grant (in terms of years since they received their PhD).
- Other relative to opportunity considerations – any other personal or professional circumstances affecting research productivity. These circumstances are taken into account in track record assessment.

In addition to NHMRC's principles of peer review, particularly fairness and transparency, the following principles support this objective:

- **Research opportunity:** Researchers' outputs and outcomes should reflect their opportunities to advance their career and the research they conduct.
- **Fair access:** Researchers should have access to the funding available through NHMRC's grant program consistent with their experience and career stage.
- **Career diversity:** Researchers with career paths that include time spent outside academia should not be disadvantaged. NHMRC recognises that time spent in other sectors, such as industry, may enhance research outcomes for both individuals and teams.

NHMRC expects that peer reviewers will give clear and explicit attention to these principles to identify the highest quality research and researchers. NHMRC recognises that life circumstances can be varied and therefore it is not possible to implement a formulaic approach to applying relative to opportunity considerations during peer review.

Consideration of career circumstances during peer review of grant applications

Under the *Relative to Opportunity Policy*, researchers' career circumstances are considered during track record assessment. This aims to take into account salient research opportunity considerations over the course of a research career and is not intended to address minor changes to life circumstances.

Circumstances considered during peer review include, but are not limited to:

Research

- research role(s) and responsibilities, career stage, and amount of time spent as an active researcher

Resources and facilities

- available resources and facilities, including:
 - the extent to which any additional research personnel and/or collaborators contribute to the applicant's research program
 - situations where research is being conducted in remote or isolated communities

Professional responsibilities

- clinical, administrative and/or teaching workload
- time employed in other sectors
- building relationships of trust with Aboriginal and Torres Strait Islander communities over long periods

Personal circumstances

- disability (including mental health conditions and psychosocial disability) or illness
- caring responsibilities that do not interrupt the applicant's career for an extended period (that would meet the definition of a career disruption) but still affect research productivity
- for Aboriginal and Torres Strait Islander applicants, community obligations including 'sorry business'
- any other personal circumstances

Other circumstances

- relocation of an applicant and their research laboratory or clinical practice setting
- periods of unemployment
- calamities, such as pandemics, bushfires or cyclones.

Relative to opportunity considerations do not include:

- minor (or short-term) changes that occur during the normal course of conducting research, for example, broken equipment or delayed ethics approval
- minor (or short-term) medical conditions
- recreational leave or general administrative activities related to research, such as preparation of grant applications and publications or committee-related activities.

In considering career circumstances during relative to opportunity assessment, peer reviewers are also required to consider each applicant's record of research productivity and contribution taking into account their career context, career disruptions, career stage and time spent as an active researcher.

Specifically:

- Peer reviewers should make a holistic assessment of whether the applicant's research productivity and contribution presented for track record assessment are commensurate with the opportunities available to them. To do this, peer reviewers should consider the information provided in the career overview, career context and career disruption sections of the application, as well as the number of years post-PhD or equivalent (where applicable).
- Although applicants provide an estimate of FTE years spent in active research, this is a guide only. Peer reviewers must consider the applicant's overall circumstances, opportunities for research and the associated impact on their research productivity, as described by the applicant.
- Key considerations include but are not limited to:

- applicant career stage
- the typical performance of researchers in the research field
- opportunities for the applicant to engage in research, taking into account as applicable:
 - » the number of years they have been research active
 - » professional responsibilities and employment situations
 - » personal and other circumstances (such as carer responsibilities and disability)
 - » the resources and facilities available to the applicant.
- In arriving at a score for each element of the track record assessment relative to opportunity, peer reviewers should refer to the score descriptors ([Appendix D](#)).

Peer reviewers are expected to consider each applicant's circumstance on its merits, while maintaining consistency in judgement and reasoning across all applications assigned to them.

Consideration of career disruption during peer review and in determining eligibility for Emerging Leadership Investigator Grants

A career disruption is defined as a prolonged interruption to an applicant's capacity to work, due to:

- pregnancy
- major illness/injury
- carer responsibilities.

The period of career disruption may be used:

- to determine an applicant's eligibility for an Emerging Leadership Investigator Grant
- to allow for the inclusion of additional track record information for assessment of an application
- for consideration of track record relative to opportunity by peer reviewers.

A period of career disruption is defined as:

- a continuous absence from work for 90 calendar days or more, and/or
- continuous, long-term, part-time employment (with defined %FTE) due to circumstances classified as career disruption, with the absence amounting to a total of 90 calendar days or more.¹

In determining eligibility of Emerging Leadership Investigator Grant applicants, the 10-year limit on the number of years post-PhD may be extended commensurate with the period of the career disruption.

Note: For the purposes of peer review, circumstances not meeting the definition of career disruption cannot be used to extend the 10-year timeframe for track record assessment (i.e. Publications and Leadership), they may however be considered under the career circumstances provisions above.

¹ For example, an applicant who is employed at 0.8 FTE due to childcare responsibilities would need to continue this for at least 450 calendar days to achieve a career disruption of 90 calendar days.

Appendix I. Guide to evaluating industry-relevant experience

Principles

NHMRC is committed to ensuring that knowledge from health and medical research is translated through commercialisation (e.g. by pharmaceutical or medical devices companies), improvements to policy, health service delivery and clinical practice.

Therefore, as a complement to other measures of research excellence (e.g. publication and citation rates), NHMRC considers industry-relevant skills, experience and achievements in its assessment of applicants' track records.

These measures recognise that applicants who have invested their research time on technology transfer, commercialisation or collaborating with industry, may have gained highly valuable expertise or outputs relevant to research translation. However, NHMRC acknowledges that these researchers will necessarily have had fewer opportunities to produce traditional academic research outputs (e.g. peer reviewed publications).

Therefore, peer reviewers should:

- appropriately recognise applicants' industry-relevant experiences and results
- allow for the time applicants have spent in commercialisation/industry for 'relative to opportunity' considerations.

Who might have industry experience or be preparing for industry experience?

Many applicants to NHMRC may have had industry experiences of various kinds. Examples include, but are not limited to:

1. Researchers who have left academia to pursue a full time career in industry (e.g. in pharmaceutical, biotechnology or start-up companies). In such instances, outputs must be assessed 'relative to opportunity', as there may have been restrictions in producing traditional research outputs (such as peer reviewed publications), but highly valuable expertise gained or outputs produced relevant to research translation (such as patents or new clinical guidelines).
2. Academic researchers whose work has a possible commercial focus. These researchers might not have yet entered into commercial agreements with industry and have chosen to forego or delay publication in order to protect or extend their intellectual property (IP).
3. Academic researchers who have translated their discovery into a collaborative agreement with industry. The researcher may be collaborating with the company in further research and development; may have a licensing agreement; or may have licensed or assigned their IP to the company. A researcher may ultimately leave the academic institution and become Chief Executive Officer, Chief Scientific Officer, Chief Technology Officer, Scientific Advisory Board Member or consultant for a start-up or other company, based on their experience.
4. Academic researchers who are actively collaborating with companies, for example by providing expert research services for fees. Publications of such work might be precluded or delayed according to contract arrangements. The specialised nature of this research might also restrict publication to specialised journals only, as opposed to generalist journals.

Relevant industry outputs

Level of experience/output	IP	Collaboration with an industry partner	Established a start-up company	Product to market	Clinical trials or regulatory activities	Industry participation
Advanced	<ul style="list-style-type: none"> Patent granted: consider the type of patent and where it is granted. It can be more difficult to be granted a patent in, for example, the US or Europe than in Australia, depending on the patent prosecution and regulatory regime of the intended market National phase entry and prosecution or specified country application 	<ul style="list-style-type: none"> Executed a licensing agreement with an established company Significant research contract with an industry partner Long term consultancy with an industry partner 	<ul style="list-style-type: none"> Achieved successful exit (public market flotation, merger or acquisition) Raised significant (>\$10m) funding from venture capital or other commercial sources (not grant funding bodies) Chief Scientific Officer, Executive or non-executive role on company boards 	<ul style="list-style-type: none"> Produce sales Successful regulator submission to US Food and Drug Administration (FDA), European Medicines Agency, TGA etc. Medical device premarket submission e.g. FDA 510(k) approved 	<ul style="list-style-type: none"> Phase II or Phase III underway or completed 	<ul style="list-style-type: none"> Major advisory or consultancy roles with international companies
Intermediate	<ul style="list-style-type: none"> Patent Cooperation Treaty (PCT) or 'international application' Provisional patent 	<ul style="list-style-type: none"> Established a formal arrangement such as a consultancy or research contract and actively collaborating 	<ul style="list-style-type: none"> Incorporated an entity and established a board Has raised moderate (>\$1m) funding from commercial sources or government schemes that required industry co-participation 	<ul style="list-style-type: none"> Generated regulatory standard data set Successful regulatory submission to Therapeutic Goods Administration or European Conformity (CE) 	<ul style="list-style-type: none"> Phase I underway or completed Protocol development Patient recruitment 	<ul style="list-style-type: none"> Advisory or consultancy role with a national company

			(e.g. ARC Linkage, NHMRC Development Grant)	marking <ul style="list-style-type: none"> • Medical device: applications for pre-market approval 		
Preliminary	<ul style="list-style-type: none"> • IP generated • Patent application lodged • Invention lodged with Disclosure/s with Technology Transfer/Commercialisation Office 	<ul style="list-style-type: none"> • Approached and in discussion with an industry partner under a non-disclosure agreement. No other formal contractual arrangements 	<ul style="list-style-type: none"> • Negotiated licence to IP from the academic institution 	<ul style="list-style-type: none"> • Developed pre-good manufacturing practice (GMP) prototype and strong supporting data • Established quality systems 	<ul style="list-style-type: none"> • Drug candidate selected or Investigative New Drug application filed • Preclinical testing 	