

Refereeing grant applications for projects

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Getting in the right head space

- *What is your role as a referee?*
- *Acting professionally and ethically as a referee – a referee's 'code of conduct'*

Much of what I will say will specifically relate to ARC Discovery Project (DP) applications, being the best illustrative example of dealing with research projects

Your role as a referee

- To provide an **'expert'** assessment of the **merits** and **feasibility** of the research project and the **research track record** of the applicant(s).
- To often provide this assessment **relative to a number of other applications**, which is most commonly done by ranking applications or using a percentile grading scale. *Relative assessments are more useful than absolute ones!!*
- To evaluate applications on the basis of a set of strict and well defined criteria, that reflect the purpose/goals of the funding scheme.

Important notes:

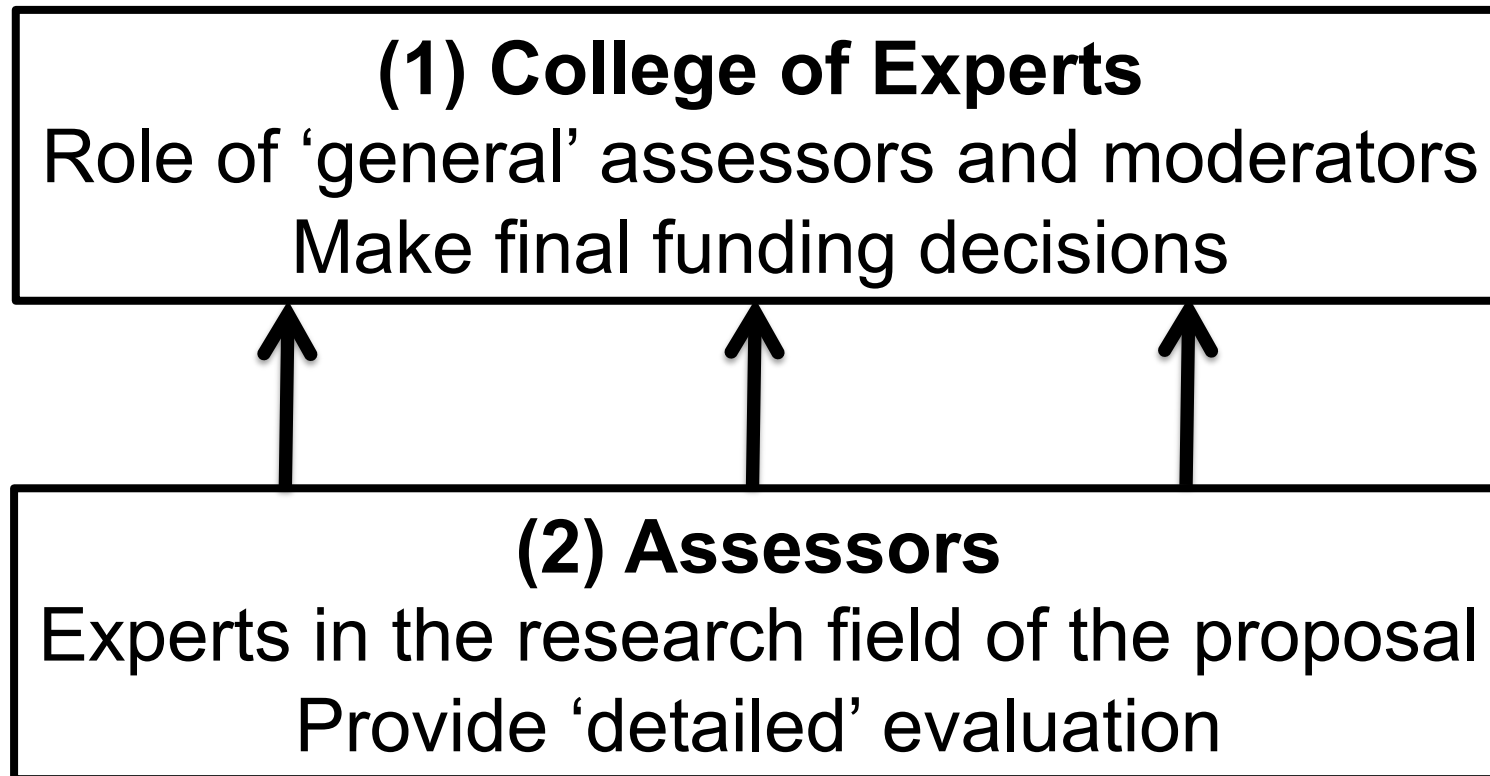
- The integrity and propriety of the grant funding system is critically dependent on high quality peer review!
- Without well-considered, objective, and independent input from multiple expert reviewers, bad funding decisions will be made.
- So take refereeing very seriously, do it when asked, and remember that a well-working grant refereeing system will benefit you when it is your turn to be an applicant!

Major issue: reviewer fatigue

Assessor type	Year		
	2008	2007	2006
CoE	2.00	2.00	2.00
OzReaders	1.85	1.84	1.81
IntReaders	1.17	1.92	1.90
Overall	5.02	5.75	5.72

- ❖ **Worsening trend continued in 2009 and 2010**
- ❖ Many cases where only **one** of the 4 Oz/IntReaders responds!
- ❖ Reports of assessors that do reply often minimalist in terms of length/detail and usefulness!

Evaluation of proposals involves **two** groups



Important facts about **College** members

- Generally senior researchers with significant track record of research grant success – know what constitutes a good application!
- They are very busy people who have to manage the time they devote to their College duties efficiently
- Their College workload is high, having to read and assess up to ~100 applications for a given scheme (e.g. DP, DECRA), plus carefully read and moderate assessor reports & rejoinders
- Very rarely work in the same specific field of research as applicant; more often work in the same general field; sometimes neither!

Your responsibilities as a referee

- Be thorough, fair, and objective in your assessment
- Make sure you have no CONFLICTS OF INTEREST with any of the applicants before you referee an application, be they **real** or **perceived**. If in doubt, err on the side of caution and excuse yourself!
[Most obvious conflicts are: direct competitor; collaborations past or present; professional, personal or financial relationships – basically anything that might preclude you providing an objective evaluation]
- Strictly observe the CONFIDENTIALITY of the peer review process
- Respect the proprietary nature of the INTELLECTUAL PROPERTY contained within grant applications

Some important do's/don'ts:

- **Do** be critical if warranted, but make sure it is well-reasoned
- **Don't** get 'personal' in writing your comments, both in remarks made about specific applicants, or by identifying yourself either directly or via mention of colleagues.
- **Do** ensure your comments are correlated with your ranking/grades – e.g. if application has weaknesses that causes you to mark it down, then say what those weaknesses are. *[Both helpful to applicants and avoids your report & grades being culled in moderation process.]*
- **Do/don't** spend more than 2/3 hrs per application
- **Don't** be verbose with your comments

Important Notes

The ARC – in particular its College members – monitor closely the performance of its referees/ assessors. 'Bad behaviour' does not go unnoticed, and carries significant reputational risk!

Bad behaviour by referees in astronomy, including the 'assassination' of applications without very good reason, runs the risk of lowering the success rate of the astronomy discipline as a whole!

Getting down to business

Firstly, a reminder of some basic principles:

- This is all about funding the very best research by individuals & teams
- Funding is very precious and highly sought after so needs to be used extremely well [*DP14: 19.9% success rate, allocated funds = 63.8% of that requested*]
- The funding is to support a project that is fixed term (DP =3 yrs)

Project – is it compelling and credible, and likely to be successful over its short lifetime?

People – do the CIs/PIs have the expertise and track record required to execute the project and deliver its outcomes?

Budget – is all the funding requested absolutely essential to the success of the project?

Assessment Criteria - DPs

- ➔ • Investigators' research track record (40%)
- Project quality & innovation (25%)
- Feasibility & benefit (20%)
- Research Environment (15%)

Investigators' Research Track Record

The following are commonly used metrics:

- Number of refereed publications – last 5 years & career total
- Number of first-authored papers – evidence of leading research
- h and m indices – impact of research (citations)*
- Quality of journals papers published in (A*, A, B system now defunct)

** Pimblet, K.A., 2011, PASA, 28, 140 "The h-index in Australian Astronomy" – useful for bench-marking.*

**BUT CRITICAL THESE BE ASSESSED RELATIVE TO
OPPORTUNITY!!**

Research Track Record: what does “relative to opportunity” mean?

Need to take into account:

- Career interruptions
(e.g. maternity/paternity/primary carer leave)
- Non-research duties
(teaching, admin, obs support)

Now
addressed
explicitly by
applicants in
their ROPE

Further considerations:

- + Track record is also about having delivered significant research outcomes from previous grants!
- + Look for significant research awards/prizes – a useful ‘tie-breaker’ between very closely ranked applications/applicants

Project Quality & Innovation

- Ask the question – is this a project that excels in terms of:
 - *Likely to significantly advance the field*
 - *New & different approach/techniques*
 - *Exploits new facilities/technologies, particularly within Australia*
 - *Has a 'blue sky'/risk element to it?*
- A good application is one which articulates the answers to the above very clearly!!

Feasibility & Benefit

- The ARC College relies heavily on the ‘expert’ referees providing a clear assessment of whether the project is technically feasible! Important that you evaluate carefully.
- Many applicants struggle to write any convincing text on the “national benefit” of the project, and do anything more than come out with the same old cliches (e.g. “this project will excite the public”). Any new/original thoughts in this area deserve some reward!

Research Environment

- Will the host institution(s) provide a research environment which will 'nourish' the lead CI(s) and their project in terms of:
 - *Appropriate alignment and overlap of research fields [CI(s) not working in isolation]*
 - *Appropriate provision/access to facilities required for project (telescopes, supercomputers)*
 - *Support for project in terms of financial/human resources and infrastructure (e.g. provision of research support funding, postgraduate scholarships & students, lab space, computers)*

General ARC grading system now used for all schemes (DP, LP, FT, LIEF)

All assessors (including College members) use the following grading scale:

- A – top 10%
- B – next 15%
- C – next 20%
- D – next 30%
- E – bottom 25%

with each application having one of the above grades assigned against each of the assessment criteria.

Assessment Criteria - DPs

- Investigators' research track record (40%)
- Project quality & innovation (25%)
- Feasibility & benefit (20%)
- Research Environment (15%)

Proposal Id	Invest TR	Proj Q&I	F&B	ResEnv	Overall weighted grade
DP15XYZ	B	A	C	B	B
	(40%)	(25%)	(20%)	(15%)	

Stored as a numerical value in RMS, lying between 75-90 (B range)

Combination of assessor/college member grades to give final grade

DP13XYZ

Assessor	Overall weighted grade
College#1	B
College#2	A
Assessor#1	B
Assessor#2	C
Assessor#3	A
Assessor#4	E
Assessor#5	B
Final grade	B (mid range)

Combined and contribute 50% to final grade

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Identified as being anomalous and either deleted or adjusted upwards