

# ARC rejoinders

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- Understand when and how they can make a difference
- Write your rejoinder keeping this in mind

# Who are your assessors?

- **2 members of the ARC College of Experts:**
  - They have a broad knowledge of your area of research (Biology, Mathematics, Economy, etc.), but in most cases are not really specialists in your field.
  - *For example:* a neuroscientist can get assigned grants on Physiology, Pharmacology, animal behaviour, Psychology, evolutionary Biology, artificial intelligence, drug development, etc.
  - They read anything between 100 and 150 grants.
  - Later in the process they also become spokespersons for your grant. They will read the referee reports and rejoinders, and at a panel meeting will recommend a final ranking.

# Ranking by the College members

- They DO NOT WRITE REPORTS. They simply give numerical marks for the four criteria:

- Significance 30%
- Approach 20%
- National Benefit 10%
- Track record 40%

- This results in a ranking of applications (e.g, from 1 to 120). You don't get to see their rankings.

- **THEY DO THIS INDEPENDENTLY, AND PRIOR TO RECEIVING THE REVIEWER REPORTS OR ANY CONSULTATION WITH OTHER MEMBERS**

# Who are your assessors?

- **2 Ozreaders:**
  - They are experienced, senior researchers who have broad knowledge of your research field.
  - *For example:* All grants assigned to a given Ozreader will be about Embryology. Another will read Clinical Psychology grants, and another will read pure Mathematics grants.
  - They read anything between 4 and 20 grants. They write reports that you get to read.
  - They also give numerical marks for the four criteria, which you don't get to see. These numerical marks are used to generate a ranking (e.g. from 1 to 15).

# Who are your assessors?

- **2 Intreaders:**
  - They are people who have in-depth knowledge of your specific research field, or one technique you are planning to use.
  - *For example:* All grants assigned to a given Intreader will be about development of software for image analysis. Another will read grants about autism, and another will read grants about biological applications of nanoparticles.
  - They read anything between 1 and 6 grants (most read 1-3). They write reports that you get to read.
  - They also give numerical marks for the four criteria, which you don't get to see.
  - Again, these numerical marks will result in yet another ranking.

# WAPR- weighted average percentage ranking

- This is the number that decides 90% of your grant's fate.
- The numerical marks given by referees or CoE members are irrelevant. What counts is the *ranking* for that particular assessor.

- **PERCENTAGE RANKING (examples)**

- COE member (120 apps)
  - Ranking 1- score 100
  - Ranking 52- score 57.1
  - Ranking 120- score 0

- Ozreader (15 apps)
  - Ranking 1- score 100
  - Ranking 7- score 57.1
  - Ranking 15- score 0

# WAPR- weighted average percentage ranking

- The percentage rankings are then weighted according to the number of grants a person read:
  - COE members: x 25 (cap)
  - Ozreaders= number of grants (x 4 to x 20)
  - Intreaders= number of grants (x 1 to x 6)
- The WAPR scores generate an initial “order of merit”, which can then be modified on two occasions ONLY :
  - **In response to the rejoinders**
  - **During the August meeting**

# HOW OFTEN DO REJOINDERS MAKE A DIFFERENCE?

- With rare exceptions, they only make a difference if your grant is near the cutoff for funding.
- However, here they can make a big difference.
- ***If your grant is near the cutoff, you need to engage the support of the COE member.*** He/ she can argue your grant above or below the line.
- **THE REJOINDER IS YOUR ONLY VEHICLE TO GET THIS SUPPORT!**

CUTOFF →

“safe”  
↑

↓  
“too hard”

93.4	
82.9	
79.0	
77.3	
75.0	
75.0	72.5
71.3	66.3
71.3	
69.7	
69.7	
68.3	70.3
67.5	
63.2	67.2
62.6	
62.5	60
62.3	
62.1	61.1
61.9	
61.1	59.1
60.9	
60.5	63.5
59.7	
57.3	
56.1	
55.9	
55.5	
55.2	58.2
54.9	
54.3	
53.2	
52.7	
52.3	
52.2	
51.7	
51.5	
51.2	
50.6	
50.4	
49.2	
49.1	

# **IMPORTANT: Always assume your grant is in the “grey zone”**

- It is possible to get a relatively high WAPR even if none of the reports you saw appeared very supportive.
- It is possible get a relatively low WAPR even if the reports you read sounded supportive.
- **Why?**
  - Ranking may not be apparent from comments.
    - Some people are naturally generous in the way they assess others, some are hard markers- but they ALWAYS HAVE TO DECIDE ON A RANKING.
  - You don't see the College of Experts member scores or ranking.
    - COE members may have had a different impression of your application.

# The ranking is what counts- and you don't know that from the reports!

- Example 1: Two Ozreaders each got 9 grants to assess. The first thought that most grants were fantastic, while the second was critical of almost everybody. For WAPR, the end result is the same.

Ozreader 1 scores:	Ozreader 2 scores:	Pct Rank score
99	85	100
97	75	87.5
95	69	75
91	67	62.5
88	66	50
85	59	37.5
84	54	25
83	49	12.5
82	40	0

# The ranking is what counts- and you don't know that from the reports!

- **Example 2: The ranking by the College members can save or sink a grant:**

EAC1:	12 of 102	75 of 104
EAC2:	29 of 129	24 of 102
OZ1:	4 of 4	3 of 6
OZ2:	6 of 7	1 of 5
INT1:	1 of 1	1 of 3
INT2:	2 of 3	1 of 5
WAPR:	70- just made it	WAPR 62.2- did not get funded

- **Example 3: A highly critical referee may be an Intreader who only saw one grant:** In which case, the percentage ranking for your grant will be 100% irrespective of what is written (but this will count very little).

# REPORTS AND REJOINDERS

- After all referee reports are in, the COE member is provided with a spreadsheet where his/ her >100 grants are ranked according to WAPR.
- He/ she has the opportunity to suggest changes in ranking, to address possible injustices/ discrepancies between referees.
- **THIS IS THE POINT WHERE YOUR REJOINDER CAN MAKE THE BIGGEST DIFFERENCE**

# REPORTS AND REJOINDERS

- Any re-ranking has to be discussed and approved by the other spokesperson.
  - This person has seen a **different list of grants**, and they may not want to pass your grant over another they think is better.

WHAT THIS MEANS IS:

**THE MAIN REASON FOR WRITING A REJOINDER IS TO GIVE YOUR PRIMARY SPOKESPERSON GOOD “AMMUNITION” TO ARGUE YOUR GRANT ABOVE OTHERS**

# WRITE FOR YOUR SPOKESPERSON

- The person you are writing for will have to read >400 reports and >100 rejoinders.
- **Stick to the main points. Whenever possible, a short rejoinder is a good rejoinder.**
- Problems with long rejoinders (from a CoE member's point of view):
  - Hard to find the relevant information at a time when you are trying to do a lot, in a short time.
  - May create the impression that there are more problems than actually exist.

# THE IDEAL REJOINDER IS EASY TO READ

- Be upfront. Identify what the main issues are, and approach them directly. You can ignore minor criticism (*e.g. did not cite paper by...*).
- Provide an indication of which comment you are responding to.
- Avoid long sentences. Use plain language as much as possible.
- Don't assume the College member will go back to check things in your application. Define any terms or abbreviations that are necessary for a non-specialist to understand your argument
- If applicable, identify common threads between the reports of different referees, and provide your reply in a same paragraph.

# THE IDEAL REJOINDER IS SHORT

- Don't waste characters attacking the assessors. They will never get to see your rejoinder. It is also a waste of time to thank the assessors.
- In most cases, it is also a waste of time to quote back positive parts of your reports.
  - *Possible exception: when one referee provides the answer to contradict another (e.g. "This point was explicitly acknowledged by referee X, who stated that...")*
- **IF YOU ARE IN THE GREY ZONE, YOUR GRANT IS BY DEFINITION EXCELLENT. THIS IS TAKEN TO BE THE AVERAGE OPINION OF 4-6 PEOPLE, AND WILL NOT BE DISPUTED.** If you are not in the grey zone, doing these things will be pointless too.
- Your spokesperson will appreciate a report that is short and to the point, particularly after reading 100 examples of dense, complex and sometimes negatively-charged prose. **THIS CAN ONLY HELP YOU!**

# THINGS YOU MUST ADDRESS

- Only about 20% of the grants get funded. In terms of scientific quality alone, I feel about 40% should be funded.
- The College members are trying to make difficult decisions: to rank applications that are very similar in terms of merit.
- In this situation, I feel that the main criticisms that can justify the ranking of an application below another are (in this order):
  1. **Approach/ Feasibility:** If someone says this experiment won't work for this or that reason, **make sure you put forward a strong argument to prove them wrong!**
  2. **Significance/ Innovation:** If someone implies that this is research that will result in incremental progress, or will replicate things that are already done, **use your rejoinder to promote the new aspects, and explain why this makes an important difference!**

# THINGS YOU MUST ADDRESS

3. **Track record:** If someone makes a statement about your track record that is underserved, **make sure you put forward a strong argument to prove them wrong!**
  - Sometimes, referees have a different background and may make harsh judgments about the journals where you publish, the citations to your papers/ books, or the relevance of your other activities (teaching, supervision, committee work, government and industry interactions).
  - If this is the case, make sure your rejoinder includes a well-argued case, backed up by evidence, to demonstrate that your track record is better than implied.
  - If space allows, it is always a good idea to provide an update to your track record- new achievements.

# THE MEETING

- Applications are considered in order of WAPR, until the money runs out.
- At some point, it becomes a balance between number of funded grants and allocated budget.
- To get full or near full budget you need to be in the top 5%.
- To be in this range, the grant normally has to receive a clean bill of health from all referees.

# THE MEETING

- Near the cutoff , grants with smaller budgets and early career researcher grants may be “promoted” over big-budget items by adjusting the WAPR.
- This is another situation in which your rejoinder can be used to push your grant over the line. The spokesperson can ask to have it on the screen for other panel members to see, and in this way gather support for this decision.

# THE MEETING

- **IF YOUR MAIN CRITICISM IS ABOUT YOUR BUDGET BEING TOO HIGH**, it may be a good strategy to use the rejoinder to give your spokesperson an indication of what is the minimum you can live with.
- Only do this if you have already addressed questions about feasibility, significance and track record.
- For example:
  - *“Reviewers X and Y queried the need to run three sub-projects in parallel, involving the Fellowship applicant and two PhD students. While this personnel would be necessary for achieving all proposed aims, funding of the Fellowship is the key aspect to allow completion of experiments 1-3 within this 3 year period. This would at least provide a conclusive answer to the question of ..., which was deemed highly significant by all reviewers”*

# FELLOWSHIPS

- **CRITICISMS ABOUT THE INDEPENDENCE OF A FELLOW** for leading a scientific project cannot be ignored. This can happen particularly at the QE II/ ARF level applications.
- In order to get a Fellowship, your **grant** has to be ranked highly. Otherwise, you can be brilliant but your application won't even be discussed.
- The committee has a quota of Professorial, ARF/ QEII and APDs to distribute. They are initially assigned in order of merit **OF THE GRANT APPLICATION.**
- Again, the key issue is to answer to all substantial criticism to the project.

# SUMMARY

(Partially based on Michael Reeder's presentation, which I fully endorse)

- The aim is to convince the CoE that your application should be ranked highly.
- Don't be hostile.
- Don't waste space arguing minor points.
- Respond to every critical comment.
- Back up your arguments with facts.
- Mention achievements since the application was submitted, e.g. new research results, publications, grants and prizes.

# A FEW THINGS THAT CAN HELP

- Get feedback from a person not related to your application.
- Ask this person to make sure the emphasis is on the critical points, and that the signposting is clear.
- Ask this person to check if the answers to direct questions are provided satisfactorily.
- Ask this person to identify anything that can be deleted without loss.
- Ask this person to highlight anything that may be interpreted as passing “bad vibes”, and try to re-write these in a more conciliatory tone.
- (It is OK to sound enthusiastic)

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# Example of a Good Rejoinder

(from Michael Reeder's presentation)

START BY ESTABLISHING THE SCOPE: WHICH ISSUES/  
QUESTIONS/ REFEREES YOU CHOSE TO ADDRESS

“Three of the reports are fair and balanced (DG72036, DG79203, DG78266). They conclude that the proposed research is innovative, the work has national importance, that I have strong scientific reputation both nationally and internationally, and that I have established a very good track record. The referees make some mild critical remarks, all of which are reasonable and easily accommodated. The fourth report, DG78236, is neither fair nor balanced and contains statements which are simply wrong.”

# Example of a Good Rejoinder

(from Michael Reeder's presentation)

IF THE REFEREE'S CRITICISM IS BASED ON FACTUAL ERRORS,  
BE DIRECT IN POINTING THIS OUT

DG78236 wrote: "..., I did not feel that the simulation of fire was being done using a model of sufficient or matching resolution with the MM5 climate model."

There are many things wrong with this criticism: MM5 is not a climate model, it is a numerical weather prediction model; MM5 is not mentioned anywhere in the proposal and I have no plans to use in my work; the work proposed will be done at very high resolution, approximately 500 m for the background flow and tens of metres on the fire-scale.

# Example of a Good Rejoinder

(from Michael Reeder's presentation)

IT IS RELATIVELY COMMON FOR REFEREES (PARTICULARLY INTREADERS) TO EXPRESS CONCERN WITH THE LEVEL OF DETAIL. REMEMBER THAT THE COLLEGE MEMBER KNOWS THAT PROJECTS ARE ALSO WRITTEN FOR NON-SPECIALISTS- ENGAGE HIS/ HER SUPPORT

DG78236 wrote: “ ... the fire model was not detailed and I worry that it is not appropriate.”

The mathematical details are not included in the grant application as they would not be terribly helpful for referees without intimate knowledge of the field. Instead, a broader summary of the model is included in the proposal, and the technical details are published in the papers cited. What aspects of the fire model worry the reviewer? At present the fire model is far and away the most detailed and realistic approach to the problem.

“DE86740 suggests that the use of microarrays could, given enough time and funds, produce evidence of clear areal boundaries. In essence, this is the thinking that guided most of the research on the cerebral cortex during the 20th century; if you keep trying different stains and techniques, eventually a “magic bullet” will be discovered which will reveal the borders of non-primary areas with clarity. Unfortunately, this approach has been tried several times, confirming what one can see with a simple histological stain: primary areas are characterised by sharp borders, association areas by gradual changes, both in developing and adult brains.”

“SIGNIFICANCE AND INNOVATION: DD60941 questions the significance and the validity of the theoretical framework underlying parts of the project, stating the opinion that "most neuroscientists would accept that connectivity is the key...it matters little whether pathways are segregated...". I vigorously disagree with this point of view. Conceptually, cortical areas figure prominently in current lines of thinking about the brain (even though, in theory, anatomical segregation is not the only possible way to organise an "intelligent machine"). Knowing whether or not the currently dominant views reflect the actual organisation of the brain is precisely the focus of the present project. If funded, one can expect that in five years the assessor's statement will no longer be simply a matter of opinion, but an argument which can be backed up by scientific observations.”

# Example of a Good Rejoinder

(from Michael Reeder's presentation)

IT IS RELATIVELY COMMON FOR REFEREES TO SUGGEST THAT YOU SHOULD BE DOING SOMETHING ELSE, OR TO ASK FOR THE "NEXT STEP"

DG78236 wrote: "..., my biggest fear is that the lead scientist did not sufficiently outline how the coupled model would be used for fire management".

This comment reflects, what I believe to be, the central problem with bush fire science in Australia. Despite the importance of bushfires and prescribed burning to Australia, and the massive resources directed to operational fire management, the science of bushfires is still in its infancy. The basic science of how bushfires spread is poorly understood, and indeed, opinions still differ on such fundamental matters as the relative importance of radiation and convection. On the other hand, there are many operational management tools, but they are largely ad hoc and few (if any) are based on strong scientific principles. In Australia and overseas there is a tendency to put the cart before the horse – to develop elaborate management tools without first developing the underpinning science. The proposed research is aimed squarely at developing the underpinning science, which is the first step in better fire management.

“Given its multidisciplinary nature, it is not surprising that each of the referees has viewed the proposal from a slightly different angle, offering a number of suggestions. Ideally, and given sufficient funds, most such ideas could be incorporated, including a more vigorous molecular search and parallel studies using behaving animals or humans. However, we believe that the experiments we propose allow the most efficient and productive use of valuable research funds, providing clear answers to a number of important questions within a reasonable time frame and budget. A few specific points are discussed below.”

“DE86805 points out that the experimental design for projects 1 and 2 is adequate only for the study of areas with clearly defined receptive fields, and suggests work using animals trained for performing decision-making tasks. While fully agreeing with the first statement, we do not see this methodology as being necessary for achieving the aims of the present project. At the current state of the game, one has to choose carefully which battles to fight, taking into consideration the need to break a complex problem into manageable parts. Why start with a more complicated system, if the key answers can be obtained in a simpler system?”

# Example of a Good Rejoinder

(from Michael Reeder's presentation)

DG78236 wrote: "I also thought that the cost was a bit too high and there is no mention of the cost of computer resources – this being the most expensive part of the project. I doubt that the model will be useful running on the MacG5 that they want to buy".

The budget items are a post-doc, a graduate student, a G5 and some provision for conference travel; these are fairly modest requests. Much of the computing will be done on the VPAC cluster at no cost to ARC, and most of the analysis will be done on the G5 requested. However, I currently run very detailed numerical weather prediction codes on another G5 in the School of Mathematics with great success, and I intend to port the coupled atmosphere-fire code to the requested G5 as this will enable the code to be more widely distributed and used (which is a necessary step if the model is to become operationally useful). I think that the reviewer greatly underestimates what can be achieved with modern desktop computing."

# TRACK RECORD

“... Since the current application was submitted I have had 3 more papers accepted for publication and have submitted a further 3.”

FELLOWSHIP: This joint application has raised the question of independence of the Fellowship applicant [DH1903; DH15823], despite DH1900 stating that “Dr. X is fully capable of performing each aspect of the project...as an independent researcher”. Indeed, the present project is best described as the logical extension of a research program initiated by DR. X during his APD. Dr. X’s status as an autonomous researcher has also been recognized by the Australian Science Society (2006 XXX award), and he is first author on many key papers (including one just accepted for publication in J Scientific Science, the highest-ranking in his discipline). It must be also realized that this type of research requires substantial infrastructure and support, usually requiring collaborative teams. Thus, expecting a single-CI application is unreasonable.”