



Australian Government
Australian Research Council



MONASH University

Australian Research Council

Discovery Projects – a perspective from the panel

Leone Spiccia

Monash University
November 2008

Acknowledgements – Lloyd Hollenberg (Chair PCG panel ARC) & ARC 1

ARC Panels

College of Experts members listed by discipline group - six panels & 77 members in total

- **Biological Sciences and Biotechnology (BSB)**
- **Engineering and Environmental Science (EE)**
- **Humanities and Creative Arts (HCA)**
- **Mathematics, Information and Communication Sciences (MIC)**
- **Physics, Chemistry and Geosciences (PCG)**
- **Social, Behavioural and Economic Sciences (SBE)**

Example: Physics, Chemistry, Geosciences Panel 2008

Dave Falvey (Executive Director) (*former*)

Allan Chivas	University of Wollongong
Richard Coleman	University of Tasmania
Nicholas Dixon	University of Wollongong
Andrea Gerson	University of South Australia
William Griffin	Macquarie University
Lloyd Hollenberg (C)	University of Melbourne
Brenton Lewis	Australian National University
Nicholas Oliver	James Cook University
Colin Raston	University of Western Australia
Leone Spiccia	Monash University
Istvan Toth	University of Queensland
Rachel Webster	University of Melbourne
Anthony Williams	University of Adelaide

5 chemistry, 4 geosciences, 4 physics

Success Rates

2009 DP statistics

Total applications:	4125
Total grants awarded:	845
Success rate:	~20%
Funding awarded:	\$288m

Similar success rates across six panels
Monash: 66/349 (19%)

40-50% competitive, potentially fundable projects!

Make your proposal not just good, but outstanding!

DP Selection process – overview I

- **ARC calls for applications & guidelines made available**
- **Applicants prepare their full application and submit**
- **Panel meets in April to assign Oz Readers and Int Readers to each application**
- **Applications are sent out for assessment by peer review**
- **Each application is generally read by:**
 - 2 CoE panel members: EAC1 and EAC2, provide scores**
 - 2 OZ Readers: Australian based readers, scores & text**
 - 2-4 Int Readers: internationally recognized experts, scores & text**
- **ARC provides assessor reports to applicants & applicants submit rejoinders**

DP Selection process – overview II

- **Panels meet in (August) to consider applications, assessment reports and rejoinders**
- **Applications are ranked based on all assessors rankings, and can be modified by the College based on rejoinders**
- **Proposal budgets are carefully scrutinized in the context of the overall amount of funding to be allocated**
- **Panel has to keep in mind commitments in future years when budgets are decided**
- **ARC submits funding recommendations to Minister for approval**
- **Announcement of funding outcomes**

Review process - CoE Members

- 500-800 DP applications per panel, PCG >780 DPs
- Each DP proposal read by 2 CoE panel members
- Depending on cohort composition,
80-200 DPs/panel member!!
- Panel members expertise generally evenly split across disciplines, e.g., P(4) –C(5) – G(4)

Lesson 1: proposal must be intelligible to a non-expert in your discipline

Review process – the OZ Readers

- **Australian based readers, familiar with the ARC system**
- **Read up to 20 proposals**
- **Oz Readers assigned based on match to keywords & project summary (by a non-expert in your field)**

Lesson 2: proposal must be intelligible to semi-experts in your discipline

Lesson 3: think very carefully about your choice of keywords and the project summary

Review process – the Int Readers

- **Internationally recognized experts, Australian and/or international**
- **Read typically 2 - 5 proposals**
- **Int Readers also assigned based on match to keywords and project summary**

Lesson 4: proposal must be intelligible to experts in your discipline

Lesson 5: again think very carefully about your choice of keywords and the project summary

Re-cap on readers and assessment

- Lesson 1:** proposal must be intelligible to a non-expert in your discipline
- Lesson 2:** proposal must be intelligible to semi-experts in your discipline
- Lesson 3:** think very carefully about your keywords and the project summary
- Lesson 4:** proposal must be intelligible to experts in your discipline
- Lesson 5:** again think very carefully about your keywords and the project summary

Generic features- well ranked application

- **Uses language that presents technical matters in a balanced and accessible way**
- **Clearly presents hypotheses and/or controversies and explain how they will be solved**
- **Explains how/why the area demands funding *NOW***
- **Shows how Australian work fits into the internat^{nl} picture**
- **Backs up compelling claims of excellence and innovation with evidence and judgments of others**
- **Proposes daring, ambitious goals coupled with prudent, responsible modes of attack**
- **Links to large international research networks/activities**
- **Presents excellent progress reports on previous grants**
- **Advances compelling arguments in relation to National Interest/Benefit**
- **Provides clear justification for each budget item**

Generic features - poorly ranked application

- **Uses dense intractable technical jargon without accompanying “accessible” text**
- **Makes grandiose & implausible claims about outcomes**
- **Doesn’t support claims of excellence or past progress with evidence**
- **Weakly linked into national & international research networks**
- **Emphasizes the collection of data rather than the solution to important problems or controversies**
- **Sets a persistent negative or depressive tone about the state of the subject in Australia**
- **Shows evidence of being hastily prepared**
- **Has a poor budget justification**

Prior to submission...

Particularly for ECRs – get lots of feedback on your proposal!!

- **from the friendly Research Office** (vital to get a draft submitted by the internal deadline to get feedback on the proposal against funding rules)
- **from colleagues outside your research area, i.e., non-experts**
- **from colleagues with a good ARC track record**

Optional: attend a seminar by a panel member before submission...

Scoring categories: general comments

Be guided by the weighting to each category!

Track Record 40%

- be sure to write w.r.t. to opportunities
- claim ECR status if you can (PhD awarded \geq XX March 2004)
- discuss how to optimize with local research office, mentor & readers
- indicate common practice for assigning authorship in your field/discipline
- indicate why a particular piece of research is in your top-10 – **what is so special about it?** Can add No. cites & IFs

Scoring categories: general comments

Significance & Innovation 30%

- don't just say the research is significant & innovative, explain how & why – **why must we do it NOW?**
- propose daring, ambitious goals
- remember the triad of readership (expert, semi-expert, non-expert)
- make it easy for the reader – e.g., avoid dispersing S&I in background

Scoring categories: general comments

Approach 20%

- more technical detail for experts, still intelligible to non-experts
- demonstrate that the project is well planned and can be carried out with requested resources
- timelines can be useful

National benefit 10%

- link to National priority areas where appropriate
- avoid exaggerated, grandiose claims

Make it easy for the reader – follow recommended format!

Other general comments

Budget

- **make sure the case for each budget item is clearly argued – why is an RA or piece of equipment critical?**
- **do not inflate**
- **be guided by size of awarded grants**
- **be realistic – consider your career stage**

Role of personnel

- **clearly articulate what each and every person will do**

CI, PI, ECR & Combinations

PI contributions

- < 5 % closely scrutinized - evidence of significant contribution?
- is CI simply using PI track record to bump up application?
- detail intellectual contribution from CI/PI in budget & proposal

ECR

- sole ECR generally better
- must have reasonable track record of publications

ECR/established CI combinations

- be clear what each investigator brings to project

CI/CI combinations

- real collaborations required
- between institutions - is this simply a way around DP limits?¹⁸

Fellowships – APD

Answer mobility question carefully

- **If ECR staying at home institution need to present strong arguments – tenured?**
- **CI's applying with APD/ARFs need to address this very carefully, especially if Fellow is already working in group**
- **Lack of mobility, perceived continuation of PhD work**

Track record – relative to opportunity

- **PhD on or after XX Mar 2006**
- **Highlight any diverse experience and contributions**
- **Must have publications from PhD plus postdoctoral period (if applicable)**

Fellowships – ARF/QEII

- **Extremely competitive**
- **Initial:** PhD on or after XX March 2001
- **Subsequent:** PhD on or after XX March 1996
- **Track record:** quantity & quality of publications
- **Need to demonstrate independent work post PhD**
- **Citation impact**
- **Journal quality**
- **Research Environment:** Highlight benefits but also what ARF/QEII will bring to environment to enhance research

Fellowships – APF

- **Extremely competitive**
- **Often established researcher, must have superb track record**
 - **High quality publications in best journals – in field plus more general (e.g., Science, etc.)**
 - **Strong evidence of international recognition in field**
 - **Awards**

Seek advice on likelihood of success – TR is 50%!

Linkage projects - general comments

2008 Round 2 & 2009 Round 1 LP statistics

Total applications:	472	441
Total grants awarded:	202	218
Funding awarded:	\$62.5m	\$72m
Success rate:	43%	50%

Panel Success rates Range:

2008 Round 2: MIC (37%) - PCG (48%);

2009 Round 1: PCG (41%)- HCA (56%)

Monash: 13/25 (52%); 19/34 (56%)

Linkage projects

Note the weightings for each category!

- **Track Record (20%):**

As for DP, but highlight any experience with industry projects

- **Significance and Innovation (25%):**

As for DP, looking for groundbreaking/innovative/internationally competitive research

Will not support routine development that industry should be funding!

Linkage projects

- **Approach & Training (20%):**
As for DP, but if project involves APA(I) must demonstrate that project is suitable for research training
- **National Benefit (10%):**
Economic and social benefits very important
Address National Research Priorities
For overseas industry partners – spell out benefits to Australia. How will the research outcomes be used here?
- **Partner Organization (25%):**
Minimum cash 20%; 50% for >\$500k pa requests
Cash + in-kind match ARC request
Is partner intimately involved in research?
What is the nature of in-kind contributions?