Tips for BBSRC grant success

Dear BBSRC,
Please give me lots of money to do some really exciting research.
Love,
Helen
P.S. Here are some details about what I would spend it on.

Helen White-Cooper

- Currently deputy chair BBSRC response mode committee C.

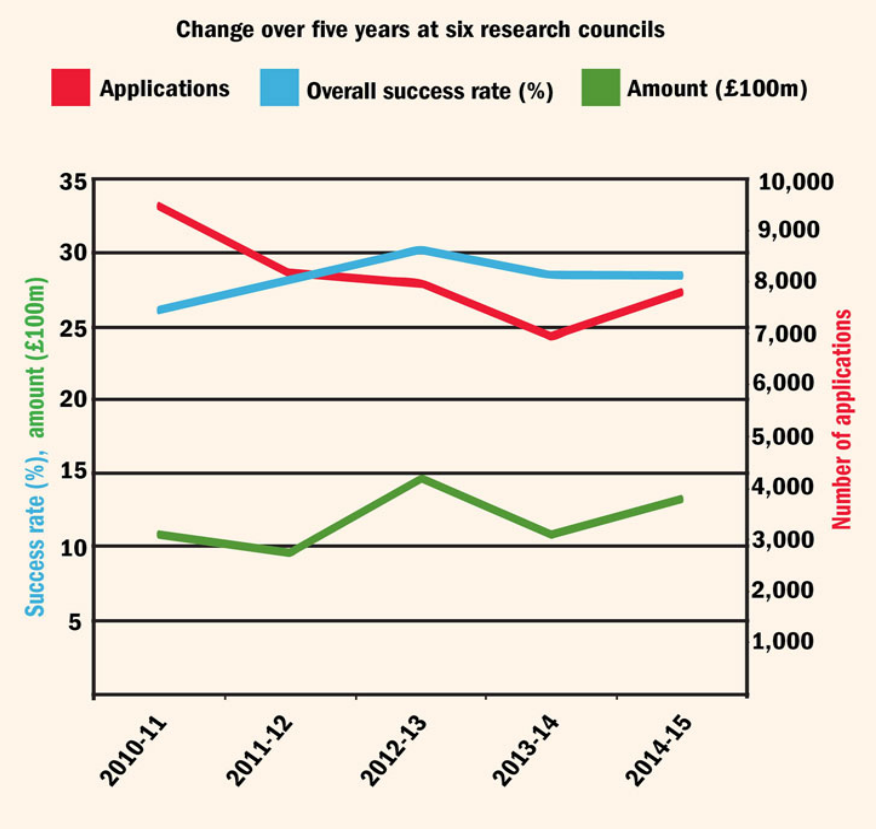
- Panel member since 2012.
  - experience with iCASE, BBR, TDRF, response mode panels D and C.
  - 13 panel meetings to date.

Research Council – Success Rates

RCUK - Grant application success rates:

- BBSRC 25% (2015)
- MRC 22% (2015)
- NERC 25% (2015)
- EPSRC 38% (2015)
- ESRC 12% (2015)
- AHRC 23% (2015)

- Demand and competition is high
- Demand management - EoI, caps etc.
- Obtaining grant funding is hard and getting harder in a challenging economic environment



RCUK – Aggregated success rates (2015)

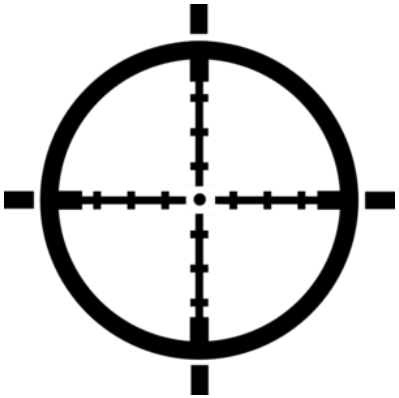
A track record of successful grant applications

Getting funding is hard. But it's not impossible.

- 18/27 of the applications on which I was PI have been funded.
  - Royal Society, MRC, BBSRC and Wellcome Trust.
  - 3/5 BBSRC response mode applications funded since I have been Cardiff (April 2008).

Shotgun vs. Sniper approach

Approach to grant submissions:



Sniper approach - Detailed planning, precise targeting and careful timing

- Generally the better approach to ensure your application is fully developed and best appreciated but is time consuming and so be conscious of efficient development time as application rate can drop and if your unsuccessful then your research income is vulnerable

Shotgun approach - You are looking to spray a lot of pellets (applications), fire quickly and hope that something hits

- Not a reliable method but can be effective against fast moving targets e.g. new highlights and initiatives with limited call times. These types of grants test reactivity of researchers to develop excellent applications quickly.

Submission rates: if you never fire a shot you'll never hit the mark so be conscious to keep putting in applications consistently

Grant timeline – applicant view

1. Have an idea
   - Let it fester (ferment? mature? compost? degrade? shrivel and die?) for a bit.
   - Decide it really is worth doing
   - Conjure up a bit of money to get it started – graduate student, project student, yourself?
   - Identify collaborators if needed
2. Do some preliminary work
   - Decide that it has potential. If not, bin it and return to step 1.
   - Generate enough background data to support an application
3. Write proposal outline
4. Refine idea (input from colleagues).
5. Rewrite proposal (input from colleagues).
   - Repeat steps 4 and 5 as often as necessary. Return to step 2 if needed.
6. Submit proposal
   - Wait
7. Receive reviews
8. Respond to reviews
   - Wait
9. Receive funding outcome letter.
   - Yes – party. Then do the work.
   - Start again at step 1 with new idea.

   - No – start again at step 4 with revised idea.
   - Start again at step 1 with new idea.

Assessment Process – Know your audience

Project Development → Internal University Peer Review

Proposal submitted

Remit / eligibility check

- PI/ Co-I and institution eligibility
- The project is within the BBSRC/ call remit
- The grant is not an uninvited resubmission
- Directed to best fitting committee
- All the paperwork has been correctly completed
- The fEC costs are correct

Committee/Pool members assigned

- Office staff assign committee members to each proposal based on expertise
- The "introducers" (at least 2) lead on the discussions in the meeting
- Applicants nominate four reviewers on their Je-S form
- Peer Review Officers select some of the nominated reviewers, and select other reviewers themselves
- Reviewers must not come from the applicant's or collaborator's institution, or have an existing collaboration with the applicant

Reviewers selected

External reviewing

- Request to review sent via email
- Anonymised reviewers' comments are sent to applicant
- Applicant (PI) submits a response to the reviewers' comments

PI response to reviewers ↕ Review comments

Committee meeting

Funding Body Final Decision

Feedback ← Grant awarded

- Proposals are funded from the rank-ordered list (e.g. top 20-25%) based on available funding
- Those above the 'funding cut-off' are sent award letters. Once the grant has been announced, ownership passes to "Post Award process"
- Those falling below the funding cut-off are sent notification letters and receive feedback on request

Typical application composition

- Application form (Je-S form)
- Summary section includes:
  - Objectives
  - Summary / Technical Summary
  - Academic Beneficiaries
  - Impact Summary
  - Summary of Resources

- Attachment list typically includes:
  - Justification of resources (2 sides A4)
  - Pathways to Impact (2 sides A4)
  - Case for support (Description of proposed research project plan and track record of applicants (max. 8 sides)
  - Diagrammatic work plan (1 side A4)

- Annexes – only ones allowed:
  - Statements of support from Project Partners
  - Equipment quotes
  - CVs for Applicants and RAs (2 sides of A4 each)

- **Note:** specific grant types may have additional requirements, modifications or exclusions

Assessment Criteria

- Scientific excellence
- Strategic relevance
- Economic, social and knowledge impact
- Timeliness and promise
- Value for money
- Staff training potential of the project
- Industrial and stakeholder relevance

Always the most important

Failing to get these right can also leave an application uncompetitive

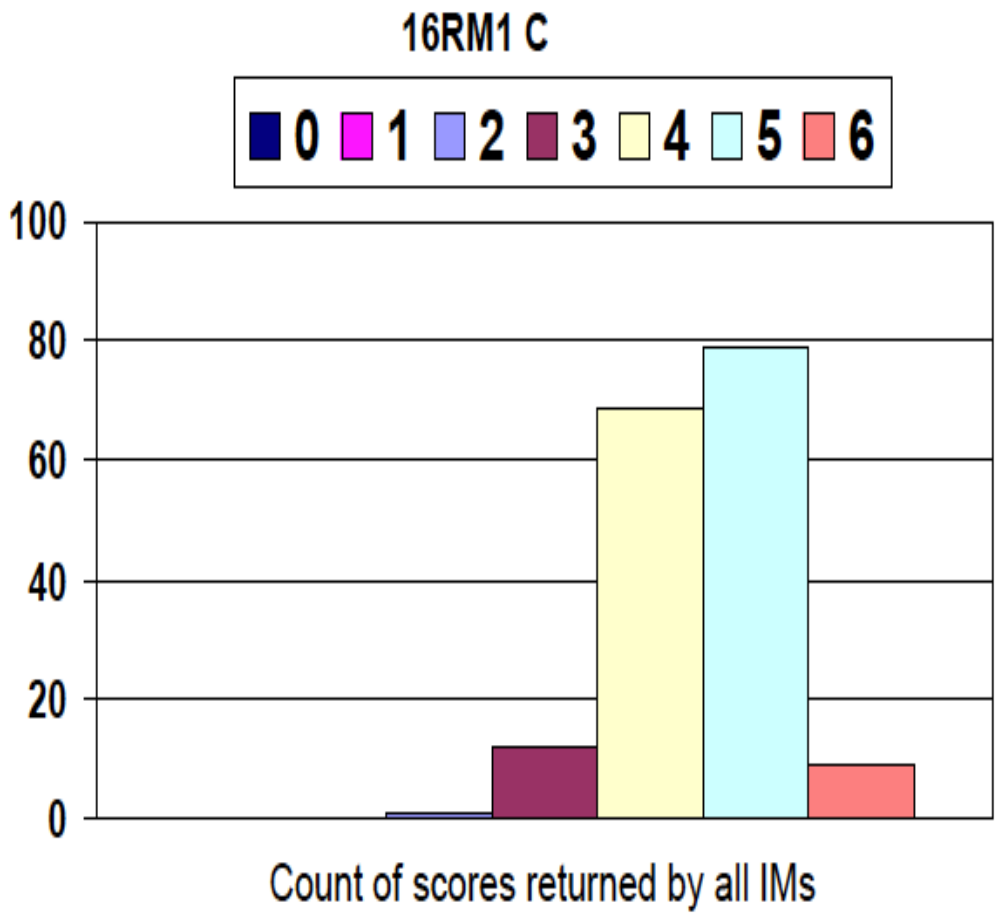
Assessment Scoring (Scientific Excellence Example)

Score	Description	Definition
6.0-6.9	Exceptional *Fundable*	Work that is at the leading edge internationally, addresses all of the assessment criteria, and meets the majority of them to an exceptional level. Likely to have a significant impact on the field.
5.0-5.9	Excellent *Fundable*	Work that is of a high international standard, and addresses and meets the majority of the assessment criteria to a very high level. Will answer important questions in the field.
4.0-4.9	Very Good *Fundable*	Work that is internationally competitive and meets the majority of the assessment criteria to a high level. Will advance the field.
3.0-3.9	Good *Fundable*	Work that has merit and meets the majority of the assessment criteria to an adequate level. Likely to advance the field.
2.0-2.9	Not Competitive *Not fundable*	Work that is potentially of some merit, and meets some of the assessment criteria to an adequate level, but which is not internationally competitive. Unlikely to advance the field significantly.
1.0-1.9	Unfundable *Not Fundable*	Work that is of no significant scientific merit, flawed, or duplicative of other research and which does not meet the majority of the assessment criteria to an adequate level. Unlikely to advance the field.

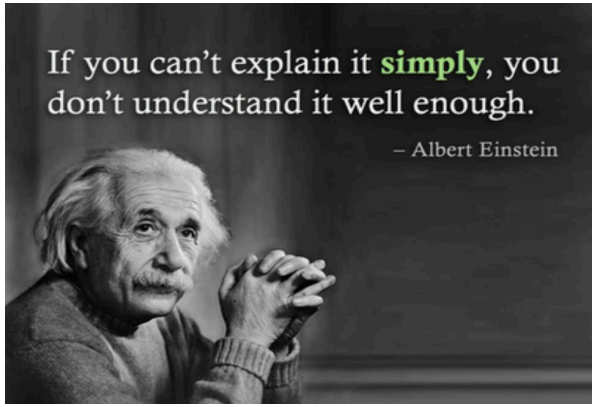
Committee Score Distribution (Example)

Typical Committee Score Distribution:

- Majority of scores are in the 4.0-5.9 range
- New reviewers tend to score too high or too low
- Margins are fine between funded and unfunded projects
- Little things can quickly add up to push a project below the funding line
- The devil is in the details – ensure all aspects are fully considered and conveyed properly



Frequently Asked Committee Questions?



- Is it top quality internationally competitive science?
- Is it addressing an important problem?
- Is it novel and exciting?
- Are the aims and potential outcomes of the grant crystal clear?
- If we give them the money what will they deliver?
- Does the accompanying data support the proposal?
- Is the work feasible – are there contingencies?
- Can this applicant (or team) deliver the project?
- Is there a pathway for all the potential impacts of the research?
- Can a non-specialist understand why the work is important?

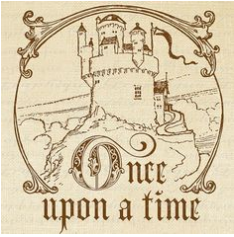
Things they say

- Incremental
- Overambitious
- Too risky
- Worthy but dull
- Poorly formulated
- Confusing
- Contradictory
- Not novel

- Exciting
- Innovative
- Cutting edge
- Novel
- Achievable
- Clearly presented
- Paradigm shifting
- Cool

Good luck

Fairytale writing vs. Impact writing



...Charles Darwin set sail...

...background...

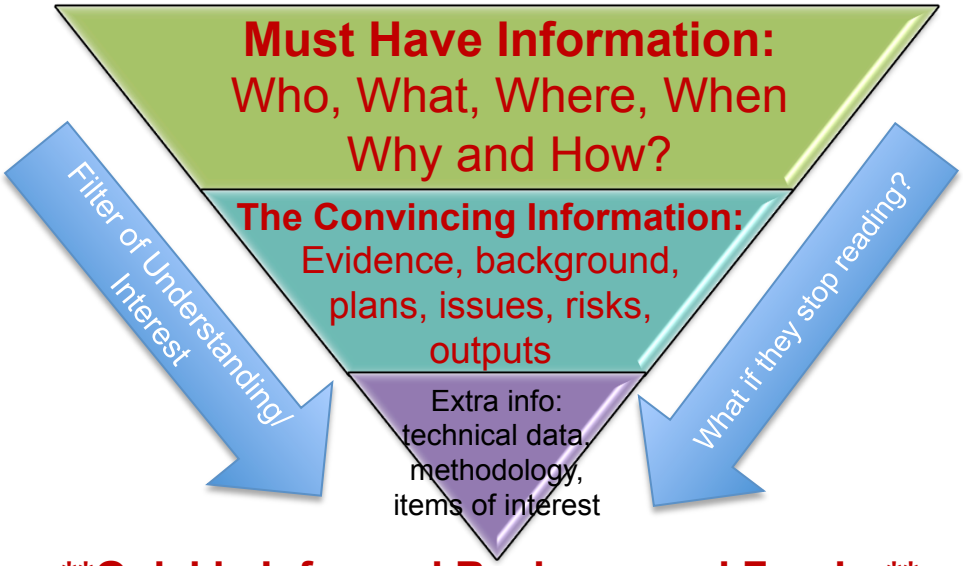
...noticed some differences between finches...

...story...

...the point...

...created new theory of Evolution!

****This narrative structure - can make important information difficult to find quickly ****

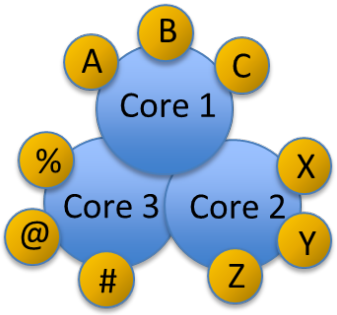


****Quickly Informed Reviewer and Funder****

Writing Structure – Case for support

Guide the reader on the upcoming structure

- Be clear of the project structure in your own mind to help convey it to others
- Describe the structure you're going to lay out for reviewers so they know what to expect. E.g. there are three core aspects to this project…A,B and C



- **Sub-headings –**
  - Separate sections and define distinct areas
  - Reuse objective bullet points as subheadings
- **Bullet points -** Use to highlight key points (points should be distinct)
- **Paragraphs -** Each should have a distinct purpose (don't be too long/ avoid big blocks of dense text)
- **Outcomes –** At the end of each section state the deliverables "These experiments will reveal…"

Mirroring

- Print out the call guidance text and use it as a writing resource
- Echoing/ reflect back the keywords, language, terminology, structure and the expected approaches laid out in the call text
- Helps demonstrate alignment with the call, strategy and focused writing

Technical summary

- This is the first block of text anyone reads from your grant (after the title).
  - Potential reviewers are sent this with the invitation to review
    - Make them want to say yes.
  - Grant panel introducing members are sent a spreadsheet with 100 technical summaries.
    - Make them want to introduce your grant.
  - Chairs get this in their meeting papers
    - Help them steer the panel towards discussing the importance and novelty of your science.

Objectives

- The panel will all see this at the meeting. It's the first section in the grant documentation.
  - What is your question?
  - Why is it important?
  - How will you answer it?
  - What will you deliver?

Objectives

List the main objectives of the proposed research in order of priority [up to 4000 chars]

This project has two major aims and within each aim are a series of independent objectives.

First Aim – question. How does our gene do what it does?

Summary of background and preliminary data setting up the question

Our objectives are to answer these 5 specific questions:

List of specific objectives.
These get repeated in the case for support

Second Aim. Does it do anything else unexpected?

Summary of background and preliminary data setting up the question

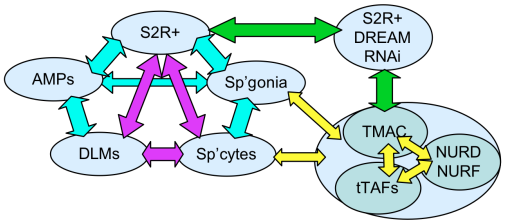
List of specific objectives.
These get repeated in the case for support

Lay summary

- Can an intelligent non expert understand it?
  - Your mum?
  - Your teenager?
  - A university student?

Potential to be imaginative with your timeline document

The schematic illustrates the samples to be compared in the four work packages. The gantt chart shows the timings of specific activities. Post 1 is primarily responsible for the data analysis, Post 2 for the lab work.



1 Are spermatocytes unique or do other differentiated cells have non-canonical chromatin features?

2 How does the chromatin architecture of differentiating cells change during development?

3 How do tissue specific transcription factors and general chromatin remodellers impact on the chromatin architecture of differentiated cells?

4 How do global transcriptional regulators set up cell type specific chromatin architectures?

Work package 1.

Activity \ Month	0-6	6-12	12-18	18-24	24-30	30-36
Dissection of DLMs						
CPSA and RNAseq						
Data analysis						

Work package 2

Optimisation of AMP sorting						
Dissection of spermatogonia and AMPs						
CPSA and RNAseq						
Data analysis						

Work package 3

Dissection of spermatocytes						
CPSA and RNAseq						
Generation of stocks for ChIP						
ChIP optimisation and sample prep						
ChIP seq						
Data analysis						

Work package 4

RNAi of DREAM, optimisation						
RNAi of DREAM, sample prep						
CPSA and RNAseq						
Generation of constructs for ChIP						
ChIP optimisation and sample prep						
ChIP seq						
Data analysis						

Contingency additional sample prep						
Integrative data analysis.						