SPARC Proposal Writing Workshop

Getting BBSRC Research Grant Funding

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Animal Sciences Branch
BBSRC
BBSRC’s SCIENTIFIC MISSION

To promote and support high-quality basic, strategic and applied research and related postgraduate training relating to the understanding and exploitation of biological systems.
Funding – commitment 07/08

Responsive mode Grants [44%]

Directed Initiatives [8%]

Institute Core Grant [18%]

Training and Fellowships [10%]

Institute capital and restructuring [12%]

KT and Innovation [3%]

Large facilities [1%]

Administration [3%]

Source – BBSRC 2004 Delivery Plan. Figures include FEC
This is a new era for research...

Full Economic Costing

- UK Research will be more sustainable
- All costs associated with the research are now eligible
- Extra £200M from 2007/08
- £250K limit on New Investigators removed

Peer Review will continue to focus on the Excellence of Science rather than the cost of the research
Research Grants

Responsive mode
- Addresses the remit of one of the scientific committees
- Exact topic is up to the applicant
- In competition with all other proposals submitted to that committee in all subject areas
- Funded from general responsive mode allocation

Special Initiatives (Directed Research)
- Addresses a prescribed topic
- Funded from ring-fenced money
- Open for a limited time

Assessment procedure is the same for both
Research Grants

‘Average’ grant traditionally:

- Single discipline
- One postdoctoral researcher (PDRA / RA1A)
- Percentage of a technician’s time
- 3 year duration

Now encouraging:

- **Multi-discipline proposals**
- Longer where appropriate (e.g. 5 years)
- Multiple personnel
- May include access to specialist facilities
How to guarantee success

• BBSRC wants to fund the best science it can

• But there is usually only the money for the top 25 - 30%

Don’t give up, you can improve your chances...
The Process...

Most scientists regarded the new streamlined peer-review process as ‘quite an improvement.’

You can not avoid them, but you can soften the blows...
The Obvious...

Make sure you have an excellent idea

At 25% success rate you don’t need 4 good ideas a year, but you do need one very, very good one (your own if at all possible).
Also....

Make sure that it should be assessed by BBSRC

- It is in BBSRC remit
- Or, BBSRC should be the lead council for an application that crosses RCs (there is a cross council process)

If in doubt
- Visit the BBSRC website
- Ask the office
- Take advice from your peers
Which committee?

Most applications are within a single committee’s remit – be aware of the remit of the relevant ones for your area

Projects do cross committee remits – we can handle them (the office can advise)
A good proposal will have...

I'M BEGINNING TO WONDER IF OUR TERMS OF REFERENCE MAY BE JUST A LITTLE BIT TOO BROAD...

More than this...
A feasible idea

- Doable
- Ambitious, but not OVER ambitious
- Novel
- Exciting

BBSRC funds a range of science from highly fundamental through to more practical aspects
A Clear hypothesis and Objectives

Don’t:

• Be tempted to go on fishing trips, or ‘stamp collecting’

• Be tempted to free your creativity by avoiding any objectives
Maximise your chances

Read the guidelines - and adhere to them!

**BBSRC grants guide** – regularly updated, read to identify general project issues (eligibility, cost issues etc)

**Je-S guide** – use to complete the application form
Maximise your chances

Use these guides they will help you produce a readable application with all the necessary sections completed
Clear writing style

A good proposal will:

- Be clearly and concisely written
  (you have 6 sides)
- Clearly state the problems
- Include useful pictures
- Have the spilling grammar chucked
Proof of concept – takes out some of the risk...

- Preliminary data, try not to apply for the project you have already done.  
  (this is a confidential process)

- That great new gizmo, does it really work..?
A clear work plan - and contingencies (what if?)

A good proposal will have:

• A clearly set out plan of work and list of experiments clearly described (include, it will not hamper your creativity)

• A Gantt chart – we give you a free page for it

• ‘What if’ – you need to build in contingencies for unexpected results / experimental failures (this shows you have thought through the application)
Sufficient detail

A good proposal will have:
• Enough information to make a decision upon

A bad one will..
• Leave the reviewer none the wiser
• Bore the reviewer senseless with detail
A good proposal will have:

- Sufficient funds to cover the Full Economic Cost of the project (this is not cheap science though). Ask for what you need and Justify it (we give you an extra page to do so).

A bad proposal will have:

- Sufficient funds to cover the Full Economic Cost of a small African State.
- Staff on the grant with no clear roles
The peer review

• Helpful schemes

• The process
New Investigator Scheme (NI)

• Focus is on potential not track record
• Must be within 3 years of 1st permanent appointment
• There is now no upper limit on the funds that can be applied for
• Sole applicant (unless co-ap is from a different discipline)

IT WORKS:
In 2004: The NI success rate was 44% compared with average success rate of 26%
Other Schemes

Industrial Partnership Award

  Significant contribution - minimum of 10% cash

Government Partnership Award:

  Minimum 15% contribution from Defra/FSA

LINK

  Minimum of 50% support from industry

Joint Grants Scheme

  50% co-funded by DSTL (MoD)
Discipline Hopping Awards

• Enables established researchers in one field (e.g. biology) to investigate and develop skills, ideas and collaboration in another discipline (e.g. physics, chemistry, health)

• Last 3 months to a year and encourage future collaborations and interdisciplinary research

Further details see the MRC and BBSRC website.
Committee Themes and Priorities

Themes are used to:

- aid understanding of the major areas in which the Committee operates (remit)

Priority area status can be used to:

- encourage research in emerging areas
- encourage research in areas that the Committee considers to need bolstering
Committee Priorities

These can be:
- Committee specific
- Cross all committees (‘cross-committee priorities’)
- Cross selected committees (‘joint-committee priorities’)
  - Ageing as a risk factor for frailty and loss of homeostasis

Fit to priority is one of the assessment criteria for ranking grants
Ageing as a risk factor for frailty and loss of homeostasis

The aim of this priority is to understand how the normal ageing process leads to loss of homeostasis and acts as a risk factor for ageing-related pathology and disease.

e.g.

• Generic molecular and cellular mechanisms by which normal ageing acts as a risk factor for poor physical and mental health
• How does loss of homeostasis at the cellular level lead to whole organism ageing?
Initiatives

- Directed research - specific call for a topic area
- Ring fenced money
- Open for a short period of time
New Dynamics of Ageing
Research Programme

• Seven year multidisciplinary research programme led by ESRC, and sponsored by BBSRC, AHRC, EPSRC, and MRC.

• The programme seeks to:
  – explore the ways in which individual ageing is subject to different influences over the life course
  – encourage the development of innovative multidisciplinary research groups and methods
  – generate new knowledge on the ageing process, in particular, the factors contributing to ageing well.

• Third call expected in 2007 (TBC)
This differs from that of the EPSRC, although the principles are the same

- A standing peer review committee
- Referee reports advise the committee in making decisions
- No college
Scientific Committees

Membership:

- ~16 Committee Members
- Appropriate breath of scientific expertise
- Includes scientists from universities, institutes, industry, other relevant organisations
- Committee members normally serve for a 3 year term
- One third of the membership turns over each year
- Selection via Appointments Board
- Co-opted members may serve
- Members may still apply for grants to the Committee
- Conflict of interests – leave committee room
Scientific Committees

Role:

- Peer review and ranking of grant applications
- Advise on portfolio (identification of priorities and gaps)
- Evaluation of science funded
- Liaison with research and user community
With 4 meetings/year

~ 377 applications to Animal Sciences

Chair has familiarity with most applications
Overview: Peer Review Process

Proposal submitted by applicant

External refereeing (minimum of 2 reviews – Applicant, IMs, BBSRC Office)

Responses to referees comments & Submission of IM scores

Committee meeting

Final decision
Referee Reports

You have the chance as PI to respond to the report

THIS IS IMPORTANT as you have the chance to explain queries, allay concerns and provide additional details.

Be patient, clear and concise. Don’t respond angrily or be personal.
Committee Meeting

Usually lasts for 2 days, varies depending on Committee / no. applications received

There are four meetings a year

The agenda usually includes:

- Policy
- Final report assessment – now being taken more seriously
- Grant assessment
Assessment Criteria

• **Scientific excellence**
  • Strategic relevance
    • To BBSRC strategy / industry stakeholder relevance
  • Prosperity and quality of life
  • Timeliness and promise
  • Cost effectiveness
    • the resources and people required to do the work
  • **Staff training and potential of the project**
    • training and development opportunities to individuals and wider science base after completion
Grant Assessment

• Grants are introduced by two members (brief summary, strengths and weaknesses) and then discussed by the whole Committee
  • Those that are considered fundable are assessed relative to each other
  • Those that are not, are not considered further

• When all the grants have been considered, a final rank-ordered list is generated
### Assessment Criteria

<table>
<thead>
<tr>
<th>Classification</th>
<th>Definition</th>
<th>Guidance</th>
</tr>
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<tbody>
<tr>
<td><strong>High Int’l</strong></td>
<td>Work that is at the foremost internationally. Would always be expected to be successful under international peer review. Would be within the top 10% of proposals considered by the committee</td>
<td>Fundable</td>
</tr>
<tr>
<td><strong>Internat’l</strong></td>
<td>Work that is at the forefront of UK activity in the field and is internationally competitive in a significant proportion of the research proposed. Would be expected to be in the top 25% of proposals considered by the committee.</td>
<td>Fundable</td>
</tr>
<tr>
<td><strong>Low Int’l</strong></td>
<td>Likely to advance the field of knowledge, leading to publication in international journals. Worthy of support if sufficient funds are available</td>
<td>Fundable</td>
</tr>
<tr>
<td><strong>National</strong></td>
<td>Scientifically sound but not internationally competitive. Unlikely to lead to significant advancement in the field.</td>
<td>Unfundable</td>
</tr>
<tr>
<td></td>
<td>Non-competitive, unlikely to lead to advancement in the field, or flawed</td>
<td>Unfundable</td>
</tr>
<tr>
<td></td>
<td>Invite resubmission</td>
<td></td>
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Final Decision

- A set percentage of proposals are funded across all committees (currently about 25%)
- Those falling below the cut-off are sent reject letters and receive feedback if requested
- Feedback can now include rank order
Final Decision

- Feedback is based upon committee comments
- Re-writing applications by the committee does not occur, and partial funding of a proposal is rare. Usually “all or nothing” - but budget cuts can be made
Resubmissions

Remember resubmissions – they are not encouraged, there must be a substantial change if uninvited they fail.

Invited resubmissions tend to be VERY rare and DO NOT mean that the grant will be funded in the following round.
Your aim...

Respond sensibly to the referees
Write clearly hypothesis and objectives
Check guidelines and remit and take advice from colleagues
Be highly internationally competitive
Clear writing style with worplan and chart
Make sure you have an excellent idea

Hopefully!
Visit the Web Site and sign up to our email bulletin

www.bbsrc.ac.uk
www.bbsrc.ac.uk/tools/email.html