Tips for successful grant applications

Dr Maria McPhillips
• Career stages
• Considering the options
• The application process
• The interview process
• Life beyond the bench
• Early career: PhD & junior post-doc

• Intermediate career: Post-doc

• Senior: Experienced post-doc

• Returning to research
PhD to Post-doc transition

Lots of PhD support available, but there are limited fellowship options for the transition to first post-doc

- Most common route is to seek a Research Assistant position either in the lab where you did your PhD or in a new lab
- Wellcome Trust has some early fellowships:
  - Sir Henry Wellcome Postdoctoral Fellowship
  - Veterinary Postdoctoral Fellowship
  - Intermediate Clinical Fellowship
- BHF also offers an Advanced Training Award
Three to six years of post-doc experience

Large number of fellowship schemes offered at this stage, examples include:

- BBSRC: David Phillips fellowship
- CRUK: Career development fellowship
- ERC: Starting Independent Researcher Grants
- MRC: Career development award
- Leverhulme Trust: Early career fellowship
- Leukaemia & Lymphoma Research: Junior fellowship
- Royal Society: University research fellowship
  - Dorothy Hodgkin fellowship
- Royal Society of Edinburgh: Biomedical personal research fellowship
- Royal Society of Edinburgh/Scottish Government: Research fellowship
- Wellcome Trust: Career development fellowship
More than six years of post-doc experience

A number of fellowships are offered for candidates with up to ten years of post-doc experience, examples include:

- BBSRC: David Phillips fellowship
- ERC: Starting Independent Researcher Grants
- Leukaemia & Lymphoma Research: Senior fellowship
- MRC: Senior non-clinical fellowship
- Royal Society: University research fellowship
- Wellcome Trust: Senior fellowship
Research Assistant

Viable option at all career stages

Advantages:

- Salary
- Strengthen publication record
- Continued supervision & mentorship
- Opportunities to supervise junior staff
- Gain experience of manuscript and grant writing

Disadvantages:

- Short-term (usually 3 years, maximum of 5 years)
- Dependent on PI’s ability to secure continued funding
- You might not always get the credit you deserve
Returning to research

A number of schemes are offered to specifically encourage women (usually...) back to research after a career break of at least 2 years:

- British Heart Foundation: Career re-entry fellowship
- Daphne Jackson Trust: Daphne Jackson fellowship
- Wellcome Trust: Career re-entry fellowship
Permanent academic position

There aren’t many fellowship options available once you’ve secured tenure, examples include:

- BBSRC: New investigator scheme
  - Research development fellowship
- ERC: Starting Independent Researcher Grants
- Leverhulme Trust: Senior research fellowship
- MRC: New investigator grant
- Royal Society of Edinburgh/Scottish Government: Support fellowship
- Wellcome Trust: Investigator award
Person - An excellent CV + publication record for your career stage

Project - An achievable, high quality project addressing an important research question

Place - A vibrant environment with excellent facilities and respected sponsors/mentors

Preparation
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<tr>
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  • Demonstrable potential  
  • Show how the fellowship is a career step  
  • Closely involved in formulating and writing the proposal | • Novel, interesting, relevant, asking the right questions  
  • High scientific merit  
  • Clear aims, objectives, study design  
  • Realistic, achievable  
  • Risks, contingencies  
  • Must provide valid training; not an extra pair of hands  
  • Guidance from supervisor is critical | --- |


## The application process

<table>
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<tr>
<th>Questions to ask yourself</th>
<th>Steps to take</th>
<th>Key elements of each step</th>
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<tr>
<td>What is the problem and why should it be studied?</td>
<td>Selection, analysis and statement of the research question</td>
<td>• Identify the problems&lt;br&gt;• Prioritizing the problems&lt;br&gt;• Analysis of the issues&lt;br&gt;• Justification for studies</td>
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<td>What information is already available?</td>
<td>Literature review</td>
<td>• Published literature&lt;br&gt;• Other available information, eg public databases, internet</td>
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<td>Why do you want to carry out the research and what do you hope to achieve?</td>
<td>Formulation of research objectives</td>
<td>• General aims&lt;br&gt;• Specific objectives&lt;br&gt;• Hypotheses to be tested</td>
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<td>What additional data do you need to meet your research objectives? How are you going to collect this information?</td>
<td>Research methodology or study design</td>
<td>• Type of study&lt;br&gt;• Variables&lt;br&gt;• Data collection technique&lt;br&gt;• Sampling&lt;br&gt;• Plan for data collection&lt;br&gt;• Data processing and analysis&lt;br&gt;• Ethical issues&lt;br&gt;• Preliminary data or pilot study&lt;br&gt;• Safety issues&lt;br&gt;• Training, if required</td>
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• Must provide valid training; not an extra pair of hands  
• Guidance from supervisor is critical | • Which host laboratory?  
• Supervision, expertise, facilities  
• Additional skills, new ideas, fresh challenges  
• Training acquired – generic, specific  
• Other training elsewhere?  
• If not moving, why?  
• Mentorship – monitoring progress, assessment  
• Record of supervisor/mentor |
Preparing an application

The application process

General advice:
● Give yourself enough time – is a preliminary application required?
● Check remit and eligibility
● Provide all requested information
● Follow instructions closely
● Check, and check again
● Have your mentor/supervisor check it
● Don’t put all your eggs in one basket
Preparing an application

The application process

University requirements:

- Once you’ve decided to submit an application you should contact the Grants Management team in R&E with a completed **Costing Request Form** so that a **Project Application Form (PAF)** can be prepared

- A PAF must be prepared for all applications

- Once finalised, a PAF is signed by the applicant, Head of Division and Head of Department

- Applications cannot be submitted until the signed PAF is returned to R&E

- For all electronic applications, R&E have responsibility for final submission
The application process

Faculty requirements:

> 4 weeks  PI drafts project outline and formulates the budget.

  Identifies funder and submission deadlines

  PI contacts R&E and submits a costing request form
  (www.gla.ac.uk/media/media_115277_en.xls)

  4 weeks  PI begins full application – gives electronic access to R&E + RM and alerts RM to pending application

  RM addresses any questions from PI and provides guidance on funder’s rules and strategic priorities

  R&E produce a draft PAF and send this to PI

  3 weeks  PI checks draft PAF and forwards it to RM

  RM works with R&E to finalise PAF in consultation with PI

  RM alerts Assoc. Dean & Deputy Assoc. Dean to application and provides draft PAF
Preparing an application

The application process

Faculty requirements:

- R&E generate final PAF and send to PI
  - PI checks and signs final PAF and sends this and full application to RM
    - RM checks and comments on generic components of application and science proposal, where appropriate.
      - Checks final PAF
        - RM obtains HoD and Assoc. Dean signatures on PAF

2 weeks

1 week

Day before at the latest...

- RM returns signed PAF to R&E and provides PI with a signed copy
- PI authorizes R&E to submit final application
Lifecycle of an application

- **Full Applications**
  - 4-6 months
  - External referees
  - Relevant **Funding Committee** with referees’ reports
    - Rejected
    - Short-listed for interview
    - Relevant **Interview Committee**
      - Rejected
      - Awarded

- 2-3 months
What are reviewers expected to assess:

- Importance of research question
- Feasibility of methods
- Strengths and weaknesses
- Track record of applicant
- Resources requested
- Comparison with other grants
- Data sharing & management arrangements
What type of comments do reviewers make?

- "...it involves techniques with which the applicant appears to have no prior experience and for which no preliminary data are proposed."

- "...the work described in this application is over-ambitious, it could not be achieved in the life time of the investigator."

- "The poor writing, referencing and proof reading of this application significantly detract from its overall quality."

- "I had only one problem with this application, I had no idea what they were trying to do..."
Preparing for an interview

Interview preparation

- Know your proposal thoroughly
- Keep up with pertinent literature
- Practise interviews
- Speak to people who have been through this before
- Know what to expect on the day
- Bring your proposal with you
If your application is not successful

Don’t give up...

● Get as much feedback as you can – referees’ comments and interview performance

● Is there an opportunity to resubmit? Does the application have to be completely different?

● Keep trying
If you decide this isn’t for you, then what?

There are other options:

- Science writing and communication
- Science policy
- Scientific journals
- Professional organisations
- Research administration
- Funding agencies
Questions?
(I’m doing the bar tonight so do come along)

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