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HOW TO BE A FUNDABLE RESEARCHER

Summary

This chapter helps you decide the best approach to winning grants, based on your research interests and career stage. It also helps you assess how your research might rank in the eyes of referees and grants' committee members who will decide whether your projects deserve funding.

There are two Tools in this chapter. The *CV Builder* Tool helps you identify aspects of your career that strengthen your position as a credible research grant applicant. The *Defend Your Corner* Tool can be used to help achieve perspective on your research field and understand how other academics might rate your work.

Introduction

Chasing research grants can be dispiriting and time consuming. Rejection letters are an almost inevitable part of a research career. With this in mind, you must ensure three things before you start writing research grant applications:

- 1 You are a credible applicant for the grant you request. This means showing that you have the capabilities needed for every component of your proposed project.
- 2 You ask a research question that the funding agency will want to have answered.
- 3 You propose an organised programme of research activities that will answer the question.

The stark truth is that success rates for most grant schemes are often much less than 20 per cent and that writing a research grant application is extremely laborious. There is no point in submitting applications where there is no chance of winning the grant, however well crafted the proposal.



Your first grant-writing task is to find out how attractive you, your research area and your proposed projects are to funding agencies and their decision makers. This process has four elements:

- Are you eligible to apply?
- Is your research field easy to fund?
- Are you a credible applicant for your target funding scheme?
- Will your research topics and methods excite funding agency decision makers?

This chapter takes you through each of these to help you spot challenges that affect your chances of success.

Eligibility requirements

Rules governing whether individuals are permitted to apply for specific schemes vary significantly between funding agencies. Technical problems mean that you can waste time preparing applications that never make it past the agency's secretariat.

If you are a permanent employee of a recognised higher education or research institution and have residency and a home address in the country in which you are employed, you will find one or more funding schemes for which you are eligible. However, schemes vary widely in their eligibility criteria and you must be aware of the following:

Employer	While a higher education or recognised research institution is acceptable to the vast majority of funding agencies, some schemes require the project leader to be from the third sector, health service or industry. If you are an independent researcher you may find your options severely limited and you may need to find an eligible organisation willing to host your project or hire you.
Employment status	Funding agencies generally require applicants to hold a formal contract or affiliation with the host institution that extends beyond the end date of the proposed project.
Residency	Many schemes make residency (or proposed residency) in a particular country or countries a basic requirement for eligibility.
Geography	Some funding agencies and schemes limit applicants to a particular geographical region.
Career stage	This is typically expressed in years from PhD. Be aware that 'early career' can mean anything from one to twelve years from PhD.
Collaboration	Schemes may be confined to research teams of a specified minimum size or may require the involvement of non-academic partners.

The first example in this book illustrates the varying eligibility criteria of different funding agencies.



THE ELIGIBLE RESEARCHER

Here is an example of how eligibility criteria may vary using three funding agencies that support similar fields in the same country. The Arts and Humanities Research Council (AHRC), the British Academy (the UK's national academy for the humanities and social sciences) and the Leverhulme Trust (a charitable trust supporting research and education) are three of the main sources of research grants for humanities' disciplines in the UK.

This table summarises some of the main differences in general eligibility criteria:

<i>Funding Agency</i>	<i>Applicant Residency Requirements</i>	<i>Applicant Employment Status</i>
AHRC	UK residency	Employment (or equivalent) by recognised UK HE institution or research organisation. This must be in place from point of application until three months after proposed end date of grant. Contract researchers whose posts are fully funded by a research grant are ineligible. ¹
Leverhulme Trust	Not specified	Employment by a university, HE, FE institution or registered charity in the UK (and, in some cases, developing countries). The minimum employment contract must be for the duration of the proposed project. Contract researchers and retired academics who retain close links with their institution are both eligible to apply. ²
British Academy	UK residency (for most schemes)	None specified for schemes that do not include overheads (full economic costing). ³

NB. This information is indicative and prospective applicants should always check the current criteria for the relevant scheme before preparing an application. For more detail on how to find this sort of information about your target funding agencies, please refer to Appendix 2.

Check funding agency guidelines carefully before assuming you can apply to a particular scheme. If you do not seem to meet the criteria, check your status directly with the funding agency and your employer before writing your application. You should also check whether you meet your employer's own eligibility criteria.

¹www.ahrc.ac.uk/FundingOpportunities/Documents/Research%20Funding%20Guide.pdf (last accessed 20 October 2011)

²www.leverhulme.ac.uk/funding/RPG/eligibility.cfm (last accessed 20 October 2011)

³www.britac.ac.uk/funding/general-info.cfm (last accessed 20 October 2011)



Your research field

Your key task as an eligible research grant applicant is to convince funding agency decision makers that your question is worth paying to have answered. In brief, all funding agencies want to invest in research projects that ask important questions.

However, what makes a question important varies according to funding agency. Each has its own set of criteria. The agency's website always features these prominently and it is foolish to start writing applications without referring to this information.

The task of choosing which applications best fit these criteria is carried out by a grants' committee, using reports written by expert referees. It is essential to understand some key points about these two groups before you start writing:

- The grants' committee is formed of members whose expertise covers a broad area of the agency's remit, although this may be uneven. There may be no representative of your field or discipline and not all of the members are necessarily academics.
- 'Expert' is a relative term when applied to peer review. A common assumption is that 'expert' peer review means that referees have a complete and detailed understanding of the methods proposed and a boundless enthusiasm for the research question. In practice, they will know something about the field in question but they may not specialise in it.

Consequently, your proposed project may find no natural advocate as it goes through the funding agency assessment process. This is why your applications must create excitement and enthusiasm among non-partisan readers.

To this end, applicants have an advantage if they have a fair idea about possible referees or the likely composition of a grants' committee. Some funding agencies even publish lists of committee members. Others have standing panels with a stable membership. In most cases you can get some information on the type of people likely to review your application or represent it at a committee meeting.

The next example shows how different funding agencies assign disciplines to individual grants' committees.

EXAMPLE 2

INSIDE THE GRANTS' COMMITTEE

This case study illustrates the variety of grants' committee structures and memberships. Using the life sciences as an example, the table below lists some funding agencies that UK-based researchers may target.





<i>Funding Agency</i>	<i>Grants' Committee Structure and Membership</i>
Wellcome Trust	Nine bio-medical discipline-specific <i>Expert Review Groups</i> with about 10 members each. ⁴
Leverhulme Trust	The <i>Leverhulme Trust Board</i> consists of up to 10 members, all of whom are, or have been, closely involved in the senior management of Unilever. The board makes the final decision on all applications from any discipline. ⁵
European Research Council	There are nine <i>Life Science Panels</i> out of 25 panels (across all disciplines). Each is composed of 10–15 distinguished researchers acting as independent experts in the subject area of the panel. ⁶
BBSRC	Four non-clinical life science <i>Research Committees</i> with a core membership supplemented by a <i>Pool of Experts</i> . About 20 members at each committee meeting. ⁷

The Wellcome Trust is a global charitable foundation supporting biomedical research and the medical humanities. The Leverhulme Trust is a charitable trust supporting research and education across most disciplines. The European Research Council (ERC) is a European funding body that supports investigator-driven frontier research across all disciplines. The Biotechnology and Biological Sciences Research Council (BBSRC) is the UK research council for the biosciences.

This table is a good example of the varying breadth and levels of expertise offered within individual grants' committees that cover the same area. In this case, your application may come before a lay panel that covers all disciplines (the Leverhulme Trust) or a subject specific panel (e.g. 'animal disease, health and welfare' at the BBSRC). In either case, the likelihood of any committee member's interests exactly matching your area of expertise is low. Moreover, direct collaborators will be expected to declare a conflict of interest and play no part in assessing your application.

For more detail on how to find this information about your target funding agencies, please refer to Appendix 2.

In brief, 'fundable' research fields are those that generate projects that excite decision makers from outside your immediate area. The implication for your research grant applications is that you must think and write about your research in a way that appeals to non-specialists.

⁴www.wellcome.ac.uk/Funding/Biomedical-science/Application-information/Committees/index.htm (last accessed 20 October 2011)

⁵www.leverhulme.ac.uk/about/board.cfm (last accessed 20 October 2011)

⁶<http://erc.europa.eu/index.cfm?fuseaction=page.display&topicID=66> (last accessed 20 October 2011)

⁷www.bbsrc.ac.uk/organisation/structures/committees/committees-index.aspx (last accessed 20 October 2011)



Your track record

Every time you make a research funding application, you effectively put a price on your proposed research project and invite the funding agency to pay it. Furthermore, the agency has to pay this price 'up front', before the proposed research project gets underway.

As well as deciding whether the project is value for money, decision makers must be confident that you have the capabilities to carry it out. Unlike academic journals, funding agencies take a calculated and specific financial risk each time they award a research grant. They must also be sure that you will deliver the project you propose.

The most important source of information on your capabilities is your personal track record. Evidence of your previous research performance helps the grants' committee and the referees predict whether you are capable of delivering the proposed programme of research and its outputs. In simple terms, if you have done it before, they will trust you to do it again. If you haven't done it before, then you will have to convince them that you have the ability to do it for the first time.

Track record and funding scheme

The more money you request, the higher the bar will be set as regards your track record. This is partly because a research grant is a speculative investment. Quite simply, the bigger the investment, the more evidence is needed that you can deliver an adequate return. In addition, bigger projects have more components and you need to show that you are competent to carry out each of them.

Consequently, a small travel grant of a few hundred pounds may be within the reach of a researcher with modest publications. In contrast, a five-year programme grant is only accessible to applicants with impressive publications and who have successfully completed substantial funded projects.

Publications are the principal means by which applicants are expected to demonstrate their track record. They are the expected outputs of successful research activity. If your research has not resulted in publications, this may cast doubt on your ability to complete research projects successfully. In this case, a question mark will remain over whether you can deliver a return on the speculative investment you request.

In general, you or your research team should have published on all of the different kinds of research activity and using all of the research techniques used in your proposed research programme.

If you want to find out whether your publication record is suitable for a particular scheme, just go to the funding agency's website and access the list of previous grant holders. Then go to the personal web pages of the grant holders themselves and check out their publications. You can also consult the funding agency secretariat. If you do not compare well with 'the competition', set your sights lower until you have produced more or higher impact publications.

This seems like a 'catch 22' situation. However, there are ways to improve your publication track record and 'fundability' before making any grant applications on your own. These include:

- Unfunded projects that lead to publication
- Internal research grants from your institution that produce publishable outcomes
- Conference presentations
- Volunteering to help senior researchers or mentors with their projects in return for acknowledgement or co-authorship
- Acting as Co-Investigator on a colleague's research grant

Track record and project design

Whatever level of funding scheme you target, your applications need to advertise your potential as a grant holder.

It may help your case if referees and grants' committee members already know and respect your work. However, it is more likely that they will be from outside your immediate field. You cannot assume that they know you are competent to conduct the proposed project.

Consequently, make sure that evidence of your achievements is clearly communicated in each grant application. Depending on the funding scheme and your field, give the following information in your application:

- Publications (some funding agencies expect impact factor and citations to be listed)
- Previous or current research grants
- Project management experience
- Esteem indicators (editorial positions, invited talks, relevant prizes)
- Relevant experience in practice, user or knowledge transfer settings
- Evidence of any specialist skills that are not implicit in your publications

Research grant competition success rates are so low that one query about your capability or experience can spoil your chances of a grant. It is safest to assume that referees and committee members are not aware of your research

competence. This assumption makes sure you provide all the evidence on your ability to lead a funded project.

Track record and project scale

The accepted 'entry level' for research project grants varies dramatically according to discipline. If laboratories, equipment and post-doctoral research assistance are the typical resources used for research in your field, a three-year project grant is the usual starting point for first-time applicants. Anything less than that may look a little insubstantial.

However, if your discipline is characterised by collaborative research, you may have the opportunity to act as Co-Investigator (Co-I) on a very large project grant at an early stage in your career. If you work in a field where grant-funded research teams are a rarity, acting as a Principal Investigator (PI) on a one-year project grant may be the normal first step.

At the other end of the scale, travel grants or short fellowships are significant achievements in fields dominated by 'lone scholars' conducting desk research.

In addition, a number of funding agencies offer dedicated 'first grant' schemes for early career researchers and these vary in scale and ambition. Despite the implicit promise of an easier ride for inexperienced applicants, it is worth getting information from the agency about the number of applications they typically get and the number of awards they expect to make. If the number of awards is strictly limited, the 'first grant' scheme may prove more competitive than the equivalent 'standard' grant option.

You can be fairly certain that it is unwise to apply for a five-year 'large' or 'programme' award as your first grant. In order to have a good chance at this level, you must demonstrate successful completion of at least one standard project grant.

In summary, the prerequisite for standard research grants is a publication record that demonstrates a level of research independence and shows that you can deliver every component that makes up the project. If your CV also includes some of the following, this may further strengthen your case:

- Previous employment as a post-doctoral research associate (PDRA) on a prestigious funded project
- Successful completion of a smaller funded project as Principal Investigator
- Involvement on a larger grant as Co-Investigator
- A funded postdoctoral research fellowship

In every case, you are more likely to get funded if you convince the funding agency that you have the skills and capabilities to deliver the proposed project.

Your topics and methods

If your chosen project is in a field that is not well understood by ‘outsiders’, do not assume that a well-written application will enable you to buck the trend. Decide whether your field has not yet won funding because it is new and exciting, or because it fails to interest anyone outside it. The cold truth is that it is almost certainly easier to move to a different part of the funding landscape than to rearrange the landscape itself.

It is sometimes hard to look outside your academic silo and get a clear view of whether your field attracts much interest or support from a wider research community. However, there are warning signs that indicate a rocky path to research funding success. These include:

- Marginal interest in your area from your other researchers in your wider discipline
- Lack of interest and confidence in your methodological approach from the dominant branch of your discipline
- Ethical controversy
- Tendency towards hyper-criticism within your field
- Ideological disputes within your field
- Lack of public pressure or political will to address particular health or social issues

Issues such as these can serve to split your discipline into opposing camps or turn your own research area into a sleepy backwater. Neither situation makes it easy to win research funding.

In these situations, it is especially important to realise that excellence and theoretical rigour alone are not enough to win a grant. You also need to generate active enthusiasm and excitement among the decision makers. In order to do this, you must learn how to write grant applications that leave the reader wanting to support your bid.

Conclusion

This chapter dealt with the factors that make an applicant, research field and project more or less fundable. After reading it, you should be more aware of the main challenges you face to winning research grants and what you can do to present yourself as a credible applicant or to improve your research fundability.

The two following Tools are intended to help you achieve these aims. The *CV Builder* will help you present your research achievements convincingly. *Defend Your Corner* aims to help you analyse your research area in order to identify how funding agency decision makers might react to your research projects.



CV BUILDER

This Tool helps you to build a CV that will demonstrate your ability to deliver the project proposed in your research grant application.

The CV you attach to a research grant application is rather different from the one used when applying for a new job. For a start, you will often be confined to a couple of sides of A4. Secondly, you do not need to include anything irrelevant to your capacity to carry out the components of the proposed project. As will become clear later in this book, your CV is not the only part of the research grant application where you communicate and reinforce your track record, but it is an important element.

The version you submit for an individual project will show that you can deliver all the project components described in your case for support. Once you have produced an initial project design, make a list of the skills and experience needed by the Principal Investigator and any collaborators.

These might include:

- Proof of ability to produce important knowledge in a relevant area
- Publishing high-impact papers
- Line managing staff
- Supervising research students
- Delivering projects to deadlines
- Relevant data collection and analysis techniques
- Other research skills (languages, IT, dealing with vulnerable groups, etc.)
- Developing networks and contacts (gaining access to sample populations, facilities or archives)
- Organising events (conferences, workshops, etc.)
- Dealing with non-academic groups (e.g. the media, industry, policy makers etc.)

If you make this list of components at an early stage it helps you design your project more effectively. Any glaring omissions in your skills or experience might lead you to consider redesigning the project or bringing in Co-Investigators, project partners and other resources that will help make your project look more convincing.

The next step is writing a CV showing the necessary skills and experience required for your role in the project. Check whether the funding agency gives specific guidance. The sort of information needed includes:

- Qualifications: PhD, other professional training
- Brief employment history: post held, dates, job title
- Previous funding: funding agency, title, dates and value of grant



- (Selected) publications: some agencies want to see impact factor and citation counts as well
- Other dissemination: conference presentations, invited talks
- Relevant training, e.g. media training, specialist research skills training
- Supervision of research students
- Relevant non-academic work experience, e.g. with user communities, as a practitioner, in industry, with the media, outreach work
- Project management experience: include any budget management, event organisation or line management experience that might be relevant
- Other key impact and esteem indicators

You can almost certainly leave off details of your secondary education, your personal details and your teaching or administrative responsibilities (unless directly relevant to the application).

TOOL 2

DEFEND YOUR CORNER

Researchers who are deeply immersed in their field can find it hard to remember that other academics (let alone non-academics) may think their work marginal, incomprehensible or unsound. The Tool will help you identify where you might struggle in your efforts to convince funding agency decision makers that your project deserves a research grant.

According to your personal preference, use lists, diagrams, mind maps or flow charts to create your 'map'. As this exercise deals with your blind spots, it may be helpful to pair up with a colleague and work together to produce one each. Include the following:

<i>Relevant Research Fields</i>	<i>Notes</i>
Your research topic	The question you answer in your proposed project
Your overall subject area	Use part of the title of the relevant funding panel or take the nearest fit from the list of disciplines provided by the funding agency in its application form
Your branch of subject area	How you would describe your research area to academic colleagues from the same faculty

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<i>Relevant Research Fields</i>	<i>Notes</i>
The <i>dominant</i> branch of your subject area	See which areas of your subject area are best represented on the target funding agency panel or among the college of peer reviewers. Also think about which branch receives the most research grants, most media attention or the highest impact factor for its peer-reviewed journals
Any other fields that address similar issues	Be sure to include those fields that are methodologically or ideologically opposed to your own
Your methodological approach	How you answer your research questions
The <i>dominant</i> methodological approach of your overall subject area	How others answer research questions
The <i>dominant</i> methodological approach of any <i>dominant</i> branch identified	How others answer research questions
The <i>dominant</i> methodological approach of other fields that address similar issues	How others answer research questions

In respect to both the dominant branch of your own discipline and any other fields that address similar issues, ask the following questions:

<i>Do other researchers in these fields...</i>	<i>Your Branch</i>	<i>Dominant Branch</i>	<i>Other Fields</i>
Use the same approach as me?			
Understand the approach I use?			
Respect the approach I use?			
Think my topic is important?			
Cite my publications?			
Have major ideological differences in choice of topic or approach?			

The yes/no answers to these questions will tell you which sections of your research grant application require additional evidence in order to defend your choice of topic or approach and convince non-partisan decision makers from related fields. If this exercise generated lots of 'no' answers, the field is probably highly specialised. This means you have to make extra efforts to ensure that your research questions appeal to referees and grants' committees and that your methods are well justified.