

This section is for Early Career Researchers. Please send suggestions for questions or topics you would like to see covered to [newsletter@lms.ac.uk](mailto:newsletter@lms.ac.uk).

## Applying for Your First Grant

“Dear X, I’m an early career researcher and I think it’s time for me to apply for my first grant. What advice would you give me?” — We invite four experts to comment.



**Alison Etheridge** is Professor of Probability at the University of Oxford. She has been on both sides of many EPSRC grant panels.

The first thing I would say is don’t just apply for a grant because ‘it is time’. You need to have a clear idea of a project and how the grant is going to help you complete it. It will be very obvious if you are just doing this because your department wants the overheads, or because you think it will look good on your CV. Usually you will be applying for funds to support a postdoc. Have you thought about where you’ll find a suitably qualified candidate? Assuming that the answer is yes, we come to the application.

There are basic points that apply to any application. Funders usually provide very helpful advice on how to lay out your case for support and what they are looking for in each section. Pay attention to this — it marries with the questions asked of the reviewers, who will therefore be looking for answers to those questions in those sections.

Next think about your audience. Your proposal will go to some expert reviewers. Their scores will be the starting point for panel discussions. If you are applying to EPSRC, you can expect that at least one of the reviewers will be from among your own recommendations and, provided your proposal makes sense, they are likely to be supportive. The other reviewers will be chosen by the EPSRC maths team, who will try very hard to find people close to your area. But the team are not mathematicians (that’s EPSRC policy) and so the reviewers may be some way away from your own interests. Be careful not to assume too much of the reader; even the more technical sections should be comprehensible to quite a wide range of mathematicians.

Reviewers will expect to see some specific problems (within a bigger programme) and proposed ap-

proaches to them. For a first grant they may pay special attention to ‘management’ of the project — you don’t have a long track record of supervision, so be careful to explain how you will go about working with a postdoc and looking after their career development. Evidence of a ‘backstop’ in the department would be good.

And now think about the panel. Most panel members will only hope to understand the first few paragraphs of your proposal. You have about half a page in which to grab their attention and make them believe that your work is really worthy of support. The question that you absolutely have to answer right at the start is “Why should I care?”.

It is easy to dismiss the description for a lay audience. Don’t! If you can make your work sound compelling to a non-mathematician, then you’ll probably have won over the average panel member. And although lots of the questions (and especially the Gantt chart) can seem really annoying, it is actually a useful exercise to think about the timing of the project and place it in a broader mathematical and scientific context.

Finally, remember that no matter how good your application there is always an element of luck, so you shouldn’t be too disheartened if the grant is not awarded. You certainly won’t get it if you don’t apply. Good luck!



**Charlotte Kestner** has recently moved to become a teaching fellow at Imperial College. She was a Lecturer at the University of Central Lancashire when she applied for the Leverhulme grant.

I recommend that you talk to your peers and to senior people about your idea, especially people in similar areas who have received grants. It’s key that you are ambitious but realistic in your project, and

advice from others can help you make sure that your project is pitched at the right level.

I recently got my first grant from the Leverhulme Trust. I had applied for a grant from EPSRC about a year earlier. I didn't get that grant, but I got positive feedback, so I developed the ideas and was delighted to receive the Leverhulme research project grant. Don't be disappointed if you don't get a grant first time, and remember that it's good to apply to many things.



### **Katharine Moore**

is a Senior Portfolio Manager at the Engineering and Physical Sciences Research Council (EPSRC), with particular responsibility for Mathematical physics, Mathematical analysis, Fellowships, and Programme Grants.

Your first grant is an important step in your career and can be an excellent way to help build your research profile. However, it can be hard to know where to start when writing your first research proposal. My first piece of advice for anyone who's thinking about applying for their first grant would be to discuss your research ideas and proposal with more senior colleagues. They are likely to raise similar questions to your reviewers, so take their advice on board. Try to ensure that the project has clearly defined objectives and outcomes. These should be articulated clearly both for your reviewers and for EPSRC (or other funder). You should also take advice from your university's research office. They will have seen many research proposals and have experience with different funders.

Aside from the quality of the research, EPSRC proposals are assessed against several other secondary criteria including National Importance and Impact. You should think carefully about how your research addresses these two criteria including reference to EPSRC strategy where appropriate. A good place to start thinking about how your research fits to EPSRC strategy is our Delivery Plan which can be found on our website. A clear pathways to impact statement is required as part of every application to EPSRC. I encourage you to consider how you can accelerate the time it takes for your research results to have benefits beyond the limits of your own area of specialisation. EPSRC consider impact in the broadest sense of the word, breaking it down into the following

categories: academic impact, economic impact, societal impact, and impact on people such as training a postdoctoral research assistant or PhD student.

Both EPSRC's Fellowship scheme and New Investigator Award scheme require a letter of support from your host institution and the level of support forms part of the assessment process. It is important that you speak to your Head of Department about how they will support your career development and encourage them to provide specific details of their commitment to you in the letter.

Finally, your PI response to reviewers is important! As panel members are not allowed to re-review proposals, a good response can make a competitive difference.



### **Iain Stewart**

is a Professor of Computer Science at Durham University. He has sat on or chaired numerous research funding panels for EPSRC and other international funding organisations. He is currently Programme Secretary for the LMS and for the past three years has chaired the Programme Committee, which decides upon the distribution of research funds for the LMS.

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I would advise that when writing your proposal, you work very closely with a mentor who has experience of writing (successful!) grant proposals to the funder in question. There are many subtleties and nuances in writing a good grant proposal, and funding experience and knowledge are absolutely crucial. It is often useful to sit down with your mentor and talk your way through a draft proposal, with the mentor providing constructive criticism and ensuring that you have covered all the angles and interpreted the guidelines appropriately. You might think that finding such a mentor might be tough but many more senior staff will be happy to help; indeed, in any good department such a mentoring scheme should be an expectation. Your mentor does not need to be an absolute expert in the topic of your research; it's the mentor's generic skills that you will hope to access. I would also recommend contacting the funder if there are guidelines that puzzle you as, in my experience, staff who administer funding schemes are almost always very happy to help, especially with those who might be inexperienced in such matters. A short phone call can often prove most useful.