

## Top Tips for Preparing Your Early Career Research Fellowship Application

The Royal Society's UK Early Career Fellowships, comprised of the University Research Fellowships (URFs) and Dorothy Hodgkin Fellowships (DHF), are aimed at talented early career scientists with the potential to become research leaders in their field. These long-term fellowships allow scientists to build independent research careers at UK institutions and carry out high-quality, innovative scientific research.

Each Early Career Research Fellow receives funding towards their salary and university costs, as well as a contribution towards research expenses. These Fellowships also come with a programme of training and mentoring to support award holders in developing as research leaders.

Applications are assessed using three broad criteria:

- The scientific track record of the applicant;
- The strength of the scientific proposal;
- The suitability of the proposed UK Host Organisation.

We have worked with the Panel Chairs who lead the assessment process for the Early Career Fellowship schemes to create this 'Top Tips' document to help you develop your application in line with these criteria.

### Scientific Track Record

1. At what point should I apply?

*"When you have formulated a vision for how your independent research program will develop over the next 5-10 years"* – Professor Jane Langdale FRS

The URFs and DHFs are for scientists who are ready to become independent researchers, so when you apply you should know which scientific questions you wish to address and how you want your independent research programme to develop during the fellowship. This should be separate to the work of your previous supervisors.

2. What does a strong publication record for an applicant look like?

You should have published research from both your PhD and any subsequent research positions. It can be beneficial to your application to have publications that are not all within a very narrow field.

*"In some fields, publications without your research supervisor and with a range of collaborators can look good."* – Professor Julia Yeomans FRS

*"It can be helpful to briefly explain your contributions to key papers on your personal statement."* - Professor Gillian Griffiths FRS

If publishing independent papers is not common in your field, you can use the career summary section of the application form to describe any leadership roles you took in producing certain papers.

Note that you can include preprints in your publications list. The Royal Society is a signatory to the San Francisco Declaration on Research Assessment (DORA), meaning we review publications on the basis of scientific content, rather than publication metrics or the identity of the journal.

3. What else does the Panel look for?

*“We value energy and enthusiasm, such as organising conferences, public communication of science, and collaborative projects. But this should not come at the expense of a solid scientific track record.” – Professor Julia Yeomans FRS*

While your research is the most important factor, additional activities that demonstrate your engagement with your field and your leadership potential can help your application shine.

### Scientific Proposal

1. What makes a good research proposal?

It is useful to provide clear signposting of what your big research questions are, and how you hope to find the answers. You could also discuss the impact of your expected outcome for developing your research field and career. You may consider the following questions while writing the application:

a. *Why is your problem important and interesting?*

b. *How will you address your problem?*

c. *Methods*

d. *What do you expect the outcome to be?*

*Sections a, d, and probably b should be comprehensible to scientists in similar areas (e.g. a theoretical physicist should be able to understand a computer science proposal). Section c should be more technical, to convince specialised reviewers that you know what you are doing.” – Professor Julia Yeomans FRS*

Your scientific track record is also important to the success of your research proposal. You should try to demonstrate why you are the right person to answer your research questions.

*“This is not just a project proposal – it is a fellowship proposal. We are looking to fund the person, not just the specific project. So there needs to be a research vision and a feasible approach, but not everything has to be ‘safe’ - some element of ‘high risk, high gain’ can signal ambitious and innovative thinking. A track record of research productivity at all career stages is important here because it will suggest that any obstacles encountered will be managed appropriately.” – Professor Jane Langdale FRS*

2. What collaborations should I include in my proposal?

Any scientific collaborations which allow you to expand and improve your research should be included. Collaborations that contribute to additional knowledge and training for you and members of your group are also beneficial to include. It would also be useful to highlight how your expertise would be beneficial for your collaborators.

*“Make sure that your contribution to large collaborations is explained, particularly if there are roles leading working groups within the collaboration. Also explain how the work you are proposing goes beyond the normal plan of work for the collaboration by emphasising your unique ideas and contributions.” – Professor Nigel Glover FRS*

3. Who should I ask for advice when writing my proposal?

More senior colleagues, scientists who are experts in your field of study but also colleagues who work in different scientific areas could provide valuable feedback for your application.

*“Your proposal will be read by both expert referees and more general reviewers who are not experts in your specific field. Therefore it is useful to get input from people both within, and outside of, your field” – Professor Julia Yeomans FRS*

## **Host Organisation**

### **1. What should I look for in a Host Organisation?**

Choosing a Host Organisation is an opportunity for you to find somewhere that provides you with collaborative links, access to facilities, and training and development options that will enhance your research.

Your host organisation should support you through from your application to your award. When preparing your application, many host organisations provide mentorship which is highly beneficial.

*“You may wish to consider the prospects for a permanent position at the end of the fellowship. Do you see opportunities for collaboration with other members of the department? Will there be opportunities and space for you to grow your research group? These factors are important when choosing a host organisation.” – Professor Jane Langdale FRS*

### **2. Is it acceptable to stay at my current Host Organisation?**

Yes, staying at your current host organisation for your Fellowship is a good option for many people for scientific or personal reasons. However, it is important to show how you will gain independence and how your research will be distinct from your previous supervisors if you are staying in the same institution that you have worked at previously. You should be able to demonstrate how your research will be different from that of your previous supervisors.

*“Think of how to position yourself so that in five years’ time both you and your current supervisor could be invited to talk in the same session at a conference – your topics are related but each of you are recognised for different content.” – Professor Jane Langdale FRS*

### **3. How do I choose a Host Organisation if I am applying from outside of the UK?**

*“You want to use the fellowship to become an independent researcher, but that doesn’t mean an isolated researcher. Look for places that are active in your field.*

*Try to find a Host Organisation that will give some help in preparing the application, such as giving feedback on the proposal and possibly practice interviews. Find out how the host will support the fellowship in terms of space and resources, and possibly longer-term prospects.” – Professor Nigel Glover FRS*