

Postdoctoral Fellowship Grant Writing Toolbox

Developed by the Early-Career Researcher (ECR) Subcommittee of the British Society for Neuroendocrinology (BSN) to provide tips and guidance for those ECRs aiming to write their first application for a postdoctoral fellowship.

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1. Understanding the fellowship

The first step is to carefully review the fellowship you want to apply for, ensuring you meet all the requirements and that you understand the purpose and aim of the fellowship, as this will be crucial for developing the project's vision. Once you have identified potential fellowships, we recommend reaching out to prospective Principal Investigators (PIs) as early as possible to confirm their willingness to host you in their lab and to discuss possible research projects.

Eligibility

Check the eligibility criteria, which usually include:

- A certain range of years after completing your PhD
- Mobility requisite, e.g. moving to a different country
- Field of study

Purpose of the fellowship

It is important to highlight how your project aligns with the specific mission and goals of the fellowship. This shows that you have carefully considered the fellowship's unique aspects, beyond just outlining a research plan.

Examples

The Marie Curie Postdoctoral Fellowship has a mobility requirement and requires moving to another country. However, if you have already relocated you could be still eligible if you have not yet completed one year of research at the time of the call deadline.

The Newton Postdoctoral Fellowship does not support applications if you are already working in the UK, regardless of the time you have spent in the UK.

Please note that when moving abroad you can explore the funding opportunities available in that country and discuss this with the PI of the host lab.

Examples

Some postdoctoral fellowships such as Marie Curie Postdoctoral Fellowship or Newton Postdoctoral Fellowship expect to see a formative project through research rather than only a very well-detailed scientific project. Human Frontier Science Program Postdoctoral Fellowships, however, expect high risk and interdisciplinary scientific projects at the cutting edge of your research field.

Sections of the fellowship

Despite being similar in most cases, each specific fellowship application form has its own sections and word limit. It is important to understand what information is expected to be given in each of the sections. It can be useful to make notes when reading the fellowship instructions to ease subsequent writing steps.



2. Writing the fellowship

We have summarised a list of points that could be useful to enhance the quality of your proposal and to bear in mind before starting to write:

Clarity

Most reviewers will not be experts in the topic you are basing your grant on and have a lot of grants to review in a short space of time. Therefore, grant writing must be focused on facilitating their understanding of your proposal.

The abstract and the introduction of your proposed project are essential to catch the interest of the reviewer. Write a good introduction with a clear schematic that allows the reader to understand your project quickly and effectively. Visuals can simplify information and enhance understanding. Only include them if they will make it easier to understand your application.

Top tips for clear writing:

- Write at a more accessible level.
- When possible, highlight in bold the key sentences to guide the reviewer to the most critical points of your project.
- Avoid defining unnecessary acronyms and using excessive jargon.
- Keep your experimental designs as simple as possible.
- Summarise information in the simplest and clearest way.
- Consider incorporating visual aids like flowcharts, diagrams, or timelines when presenting complex concepts or methods.

Methods

When describing your methods, follow a hierarchical approach. If a key aspect of your application is learning a new technique, provide sufficient details not only about the methodology but also about your training plan. Clearly outline how you intend to learn the technique, including the estimated time required and the experts from whom you will receive training. Specify that the technique is already established and routinely used in the host lab, which strengthens the feasibility of your proposal.

Due to space limitations, provide detailed descriptions only for the most critical techniques, while summarising less relevant ones.

Top tip for writing your methodology

Avoid leaving gaps in your methodology section; instead, cite references for commonly used techniques (e.g., "Hormonal measurements will be performed as described in Ref X"). Additionally, highlight any collaborations that will grant you access to specialised resources or facilities, as this reinforces the credibility of your project and demonstrates your ability to navigate potential challenges or risks related to your project.

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Credibility/Feasibility

A strong grant application must be both credible and feasible. Postdoctoral fellowships typically last two to three years, so avoid proposing an overly ambitious project with too many objectives. Instead, outline a well-structured research plan with two to three clear objectives that can be realistically achieved within the given timeframe.

If your project involves animal models, carefully estimate the time required to obtain the necessary genotypes and phenotypes. For instance, if you are studying aging, specify whether the host lab has already generated and aged the mice, allowing you to begin immediately if the grant is awarded. Alternatively, mention whether an optimised breeding scheme is in place to ensure the required genotypes are available within the first few months.

Strengthen the feasibility of your project by referencing preliminary data or pilot experiments that support your approach. If you are joining a new lab, discuss with the PI whether there is any unpublished data available to support your proposal. This demonstrates that your project has a strong foundation, reducing the perceived risk of failure. Clearly state the resources readily available in the host lab, particularly if you plan to learn a technique that is already in routine use, and if relevant, define the support that you will receive in the host lab.

Additionally, consider including a contingency plan. Outline alternative approaches in case experiments do not yield expected results. For example, if a specific mouse model does not exhibit the anticipated phenotype, explain how you would adjust your study. A well-defined contingency plan demonstrates foresight and reassures reviewers that you can manage potential risks effectively.

Suitability

Clearly define the skills you have already developed and why you are the best candidate to carry out the proposed research at the host lab. Describe what you bring to the lab and how the lab will add to the development of the project and to your own development as a scientist. Explain why the host lab is the best lab that you could choose to develop the project. Describe how your background uniquely qualifies you to carry out this research and how the host lab provides the ideal environment for your development.

When discussing suitability, highlight how your current skills and experience makes you competent to start a new research project at the host lab. This will underscore the idea that you are not only a good fit but that you will be able to acquire new competencies and to be fully operational at the host lab from the start.

Career development plan

In fellowships with a strong focus on supporting postdoctoral fellow training, it will be essential to define your career goal and your plan to achieve that goal. Your goal could be to:

- Define the main scientific goals that you will achieve during the fellowship.
- State your involvement in the teaching of PhD, Master and/or undergraduate students, which could help you to develop leadership skills.
- Develop your grant writing skills with the support of the host supervisor.
- Participate in national and international conferences and seminars.
- Attend courses and seminars.

In addition, explain how the fellowship will promote your career in the short and the long term. For example, describe how the skills and knowledge gained will support your transition into a permanent academic (or industry) position. This shows that the fellowship is a strategic step in a larger career trajectory. It may be important to highlight specific application opportunities to enhance the credibility of your long-term career aspirations.

Dissemination of the results

Clearly outline how you plan to share your research findings, both within the scientific community and with the broader public. This may include:

- Presenting at conferences and seminars.
- Engaging in public outreach activities.
- Sharing findings on social media platforms (e.g. Bluesky, Instagram).
- Collaborating with media outlets such as newspapers and science communication websites.
- Liaising with University communications departments.

Timeline

Most fellowships will require you to define clear work packages and the required time that it will take for each to be completed. Ensure the timeline realistically accounts for training periods and other preparatory steps, particularly when moving to a new institution. As mentioned in the credibility section, if mouse models are used, the time to generate the required number of mice/genotype/age must be considered carefully to avoid raising concerns with the feasibility of your project.

Ethics

If the project involves animal research, the fellowship will often require you to justify why the proposed models cannot be replaced by in vitro alternatives. In addition, you will need to provide information to explain how the project aligns with the 3Rs statement. Be sure to justify the sample size of animals per group stated in the project, for which power analyses with preliminary data could be useful. Strengthen your ethical argument by referencing specific tools or protocols used to reduce animal suffering or maximise efficiency. For example, the Experimental Design Assistant software (EDA) (https://nc3rs.org.uk/our-portfolio/experimentaldesign-assistant-eda) can be used to calculate animal numbers in order to achieve reproducible results with accompanying statistical analysis, and it will draw a diagram to help explain the feasibility of the proposed experiment.

Final tip

Consider improving your grant writing skills by applying for smaller funding opportunities such as the BSN Project Support Grant.

3. Getting feedback

Your PI is your primary resource for feedback on your fellowship application.

Additionally, seek input from colleagues who have applied for the same grant. They may be willing to share their applications or provide insights based on reviewer comments. If you have a grant service available at your university, ask an internal panel of academics to review it ahead of submission.

Have multiple people review your application, including individuals unfamiliar with your research. Fresh perspectives can help identify weaknesses and improve clarity, aligning your proposal more closely with a reviewer's perspective.

Regardless of whether you are successful or not, onboard any feedback from reviewers about your grant and use these insights to make your application or idea stronger.



4. Handling rejection and embracing success

Unfortunately, postdoctoral fellowships are usually highly competitive, with success rates typically at 15% or lower. Receiving a rejection can be discouraging, but it is a common experience even among successful researchers.

If your application is unsuccessful, consider requesting feedback, revising your proposal, and reapplying. Many fellowship recipients were not funded on their first attempt, but persistence and refining your approach can significantly increase your chances of success. Regardless of the outcome, we want to remind you that our value as a researcher is not defined by our success at fellowship applications.

If you have been successful, congratulations! Securing a fellowship is a great achievement, and we encourage you to make the most of this opportunity by developing your project, expanding your network, and growing as an independent researcher within the neuroendocrinology community.



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- Miguel Ruiz Cruz, ECR Representative Trustee

List of postdoctoral fellowships

(updated on 18 July 2025)

Name	Call deadline	Link
Newton International Fellowship	March	https://royalsociety.org/grants/ newton-international/
EMBO Postdoctoral Fellowship	January and July	https://www.embo.org/funding/ fellowships-grants-and-career- support/postdoctoral-fellowships/
BBSRC Discovery Fellowship	May	https://www.ukri.org/ opportunity/2025-bbsrc-fellowships- scheme/
Human Frontier Research Program Postdoctoral Fellowship	Letter of Intent: May Full proposal: September	https://www.hfsp.org/funding/hfsp- funding/postdoctoral-fellowships
Marie Curie Postdoctoral Fellowship	September	https://marie-sklodowska-curie- actions.ec.europa.eu/actions/ postdoctoral-fellowships

Useful resources

Check grant writing tips from the BSN Grant secretary Dr Gisella Helfer and from successful applicants at the end of the following link: www.neuroendo.org.uk/grants

The MSCA Postdoctoral Fellowship handbook can be very useful both to prepare a MSCA PF application but also to generate ideas to complete sections for other fellowships: msca-net.eu/2024/07/04/handbook-for-msca-pf-call-2024/

Credits

This Grant Writing Toolbox has been developed and coordinated by Miguel Ruiz Cruz (University of Cambridge, UK), current ECR Representative Trustee, with valuable contributions from Jessica Chadwick (Imperial College London, UK), Nicole Morrisey (University of Manchester, UK), Ines Martinez Corral (Inserm, University of Lille, France), Konstantina Chachlaki (Inserm, University of Lille, France) and Lora Martucci (University of Oxford, UK).

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