

# Writing a research grant application

We only fund the best quality research so that every penny donated towards research will benefit people with Parkinson's. We receive a high volume of applications in each grant round, so it's vital that you make your application stand out from the crowd. Below are some tips and pitfalls to avoid when preparing your grant application to give yourself the best chance of success.

## Make a good first impression

- Ensure that you are fully familiar with all sections of the 'Information for applicants' document.
- Read the Parkinson's UK research grant [terms and conditions](#) and [costs guidance](#) – make sure your requests are allowable by Parkinson's UK.
- Ask at least one independent person to proofread your application – reviewers dislike typographical and grammatical errors.
- Ensure figures make sense and are correctly referenced in the text.
- Make sure everything in your research proposal is correctly referenced.
- Even if your ideas are excellent, a badly presented application may make reviewers wonder if this is an indication of how the research will be conducted.

## Write a good plain English summary

- It is important that you think carefully about your lay reader when writing your plain English summary.
- Lay grant reviewers may have considerable personal experience of Parkinson's but little specialised scientific knowledge.
- The plain English summary must accurately reflect the research proposal and scientific abstract.
- Although the summary should be written in simple terms, please make sure that it contains enough detail for a lay grant reviewer to make an informed decision about the project.
- Applicants should be realistic about the potential outcomes of their research and the likely timescales involved.
- Avoid using jargon, abbreviations and technical terms wherever possible – if you have to use them provide a clear explanation and include a good glossary.
- Define any abbreviations in full words the first time you use them, in addition to including them within the abbreviations section.

- Avoid complicated English or uncommon words.
- Avoid elaborate explanations of 'what is Parkinson's'. Lay grant reviewers are very likely to know a lot about this already but want to know about the particular research project.
- Use active not passive phrases, for example say 'we will do it' rather than 'it will be done by us'.
- Keep sentences short – try not to use more than 15 to 20 words per sentence.
- Break up the text, for example by using bullet point lists.
- If your study involves participants ensure you have included details of what will be involved for them and how they will be supported.
- Ask someone without a scientific background to read your draft and advise if anything is unclear.
- Applicants can request lay feedback on their plain English section by contacting our [patient and public involvement](#) (PPI) programme at least three weeks prior to the deadline.
- You can find more tips on writing a good plain English summary on the [NIHR guidance for writing plain English summaries](#) and the '[Plain English Campaign](#)'.

### **Clearly demonstrate how your research relates to Parkinson's**

- Parkinson's UK only supports research into Parkinson's and Parkinson's like disorders. We want to fund research that has the greatest chance of improving the lives of people with Parkinson's.
- Applications for lab-based projects must clearly demonstrate how their research relates to Parkinson's and how it could provide valuable insights for future research.
- Scientific and lay grant reviewers have a lot of knowledge of Parkinson's and will usually have considered many applications over the years. They expect applicants to demonstrate a good understanding of Parkinson's. Applicants whose expertise and publications record primarily relates to another field should seek to collaborate with relevant experts in Parkinson's and people affected by Parkinson's where necessary.
- Parkinson's UK will consider applications which may provide insights into a number of neurodegenerative conditions, but again you will need to show the particular relevance to Parkinson's.

### **Ensure your research proposal is clear and logical**

- Make sure your hypotheses are clear and firm, and that these are reflected clearly in the methodology.
- Show how the various experiments and stages of proposed research relate to each other.
- Give clear information on what the outcome measures will be.
- Identify and address any potential challenges or pitfalls – what will you do if your first proposed experiment does not result in the outcome you expected? Or if you have challenges with recruitment or retention of participants?
- Provide sufficient detail on the experiments and how they will be carried out to show your understanding of what you're doing.

- Give realistic sample sizes and power calculations based on evidence.
- Clearly describe the future clinical benefits and timescales of practical improvements that could result from the research.
- Ensure your application includes details of how the results of your research will be made available to others.

## Consider equality, diversity and inclusion in all aspects of your research

Parkinson's UK is here for everyone in the Parkinson's community. The [Parkinson's UK Equality, diversity and inclusion \(EDI\) strategy](#) sets out our overarching goal, ambitions and EDI promise. The charity wants equity for everyone who lives with Parkinson's, and the people in their lives, in the UK. Responses to Parkinson's treatment can be different depending on a range of factors. We believe Parkinson's research should involve, include and represent all members of the community. By having a diverse network of people involved with research, we're more likely to make breakthroughs that change the lives of all people with Parkinson's. The [Parkinson's UK Race Equality in Research project](#) sets out our long-term strategy to increase engagement and participation in Parkinson's research with people from Black, Asian and Mixed Race backgrounds.

Parkinson's affects all sections of the community, irrespective of race, ethnicity, sex, gender, age, disability, sexual orientation, socioeconomic group, religion or belief. There are also a broad range of factors that can impact the metabolism and response to treatments including physiology and genetics. These differences in response to treatments can be related to issues such as race, ethnicity ([Ben-Joseph et al., 2020](#) and [Sauerbier et al., 2018](#)) and sex ([Cerri et al., 2019](#)). There can also be biases in medical devices and technologies against individuals of different ethnicities, sex, genders and other socioeconomic groups that may need to be mitigated ([Equity in Medical Devices: Independent Review](#)). For example, some devices employing infrared light or imaging may not perform as well in people with darker skin pigmentation – this would need to be taken into account in the development and testing of the devices. AI-enabled medical devices and use of polygenic risk scores in genomics may be particularly prone to biases against certain groups in the population. The '[STANDING Together \(STANdards for data Diversity, INclusivity and Generalisability\)](#)' initiative led by the University of Birmingham has published [recommendations on ensuring that the benefits of AI in healthcare are available to all](#). The social aspects of diversity also need to be considered, especially in relation to how this impacts on the way individuals are diagnosed and treated. Without a diverse group of individuals participating in research, researchers will not know if their results can be applied to all people equally.

Parkinson's UK is committed to supporting research that is inclusive, in both design and practice, and gives appropriate consideration to equality, diversity and inclusion issues to be beneficial for everyone. Applicants are therefore asked to consider and explain how they have taken these factors into account in all relevant aspects of their work. This could include:

- **Inclusive research design** – When designing research projects with human participants, applicants must consider factors such as sex, gender, age, ethnicity in their research questions, methods, implementation, outcomes and reporting. If your research involves

animal models, cells, human tissue samples, or human participants, and you are not proposing to use both sexes, you will need to justify why. Applicants may wish to refer to the guidance provided by the MRC on [sex in experimental design](#), the [Sex Inclusive Research Framework](#) for preclinical work developed by a working group led by AstraZeneca, and also the toolkit produced by NIHR and CEHR that includes help in developing [research questions that are more relevant to ethnic minority communities](#).

- **Participation and use of human tissue** – Applicants must consider how they will ensure that the participant groups and human tissue samples used reflect the diversity of the population. This could include carefully considering the eligibility criteria for study participants and the recruitment processes; developing study materials with inclusion in mind; ensuring the research team is aware of relevant cultural issues; and building partnerships with community organisations / trusted advocates. Applicants should consider if there are any issues that would impact the diversity of people with Parkinson's that would be willing and comfortable to take part (are there any barriers that would stop certain sections of the community from participating). Please refer to the guidance produced by the NIHR INCLUDE project on [improving inclusion of under-served groups in clinical research](#), the NIHR video introduction on [cultural competence in research](#) and the NHS guidance on [increasing diversity in research participation](#). Applicants should also refer to the toolkit developed in partnership with NIHR on [increasing participation of Black and Asian minority ethnic \(BAME\) groups in health and social care research](#).
- **Research team** – Applicants should consider the expertise required to carry out inclusive research and the diversity of their team, including a balance of gender, ethnicity and career stage. Researchers from under-served groups are more likely to be familiar with, and motivated to develop solutions for, health issues facing the demographic groups to which they belong. If appropriate it may be helpful to include those researching social and health disparities in under-served groups in your team. If relevant to the study, then it can also be helpful to include bilingual staff in the research team. When recruiting to your team you should consider diversity and follow best practice as advised by your Institution's HR department, including mitigating the impact of unconscious bias. It can also be helpful to consider how you will build an inclusive team environment where all feel valued and supported, with equal access to development opportunities.
- **Patient and public involvement (PPI)** – Applicants must consider how they will involve the Parkinson's community in their research. When planning involvement activities, applicants should consider diversity and take steps to ensure they are as inclusive and representative as possible. You can find out more about how to address potential barriers in the HRA [guidance on people-centred research](#).

You can also learn more in the Parkinson's UK [blog post on increasing diversity in research](#). Please find below some specific examples of steps that researchers can take to increase diversity in Parkinson's research:

- Recruiting staff (clinicians, coordinators, researchers) who reflect under-served communities.
- Developing relationships with communities over the long term.
- Engaging with communities early to make sure the research questions asked are things that the community really wants to see addressed.

- Going beyond translating clinical tests and resources by also making sure they are [culturally appropriate](#).
- Having open lines of communication to ensure people can discuss their concerns about taking part.
- Recruiting diverse teams of clinicians and researchers from the local community and training them.