Preparing a Research Grant Application

Writing a grant application is a major undertaking and there is strong competition for research funding. Several major funders impose limits on proposal resubmission, making it important for proposals to be as competitive as possible at first submission. These pages provide guidance on preparing the key parts of a grant application, and highlights who to contact for support. A high-quality proposal will maximise the chance of success, so you may wish to consider the following:

Identify relevant opportunities

It will help your planning if you are aware of the funding landscape, including the strategic priorities for funding bodies and frequently monitor upcoming Calls and their deadlines. Your Research Manager can provide advice, support, and guidance on finding research funding. They will also distribute the latest information on internal schemes, or external schemes managed internally, within the College. Additionally, you have access to the College's subscription to IDOX GrantFinder, which is a useful resource to find out about funding opportunities targeted for your discipline. You can also set up tailored email alerts so that you are aware of new Calls as soon as they're announced. Some strategic Calls are announced with a short lead time, so to make the most of all available opportunities try to be proactive and start thinking about shaping an idea as soon as possible, even if an appropriate funding scheme is not yet available.

Check the guidance notes

Science remit

Whether your proposal receives funding will rely in part on whether your purpose and goals closely match the priorities of the funding body. Even if you are conducting exciting research, if it doesn't fit the funder's scientific remit it will not get funded. It is important to check whether your research is within the scope of the Call, to avoid losing time working on an unsuitable application. Research Managers can provide advice on this, as can the funding organisations. Most organisations will advise you on where to direct your proposal, although they may ask for a brief project outline.

Investigator eligibility

Check that you are eligible to apply for the scheme. Funders offer funding opportunities tailored to specific key career stages, so check whether a particular scheme is best suited to you and your current research plans. It is important to note that for many research grants, it is only possible to lead on the project as a Principal Investigator (PI) if you have a contract of employment with your Research Organisation for the duration of the grant, or beyond, prior to application. The exception to this is usually for Fellowship applications or other grants tailored towards early career researchers, although do check with your Section Manager if you're unsure.

If an early career researcher has provided significant intellectual input to grant writing and design but is not eligible to be a PI (or a Co-Investigator), they may consider Researcher Co-Investigator status. This role is aimed at, but not limited to, postdoctoral researchers, technology specialists and clinical fellows, and is available with UK Research and Innovation (UKRI) funding opportunities (excluding research proposals for the Arts and Humanities Research Council and the Economic and Social Research Council).

Timelines

Allow plenty of time ahead of the deadline and avoid rushing the application. Some schemes have an outline or preliminary stage which is used to assess your eligibility, competitiveness, and the resources you've requested. Bear in mind that in addition to the funder's deadline, there will be internal College deadlines, to allow for checks and approvals. Applications must be submitted to the Joint Research Office a minimum of 5 days before your planned submission date to allow sufficient time for checks to be carried out. Therefore, it is recommended to give your administration team, including your Section Manager and Research Manager, as much notice as possible to allow them to provide utmost support ahead of the internal deadline.

Develop your research proposal

A well-written grant should acknowledge both the larger context as well as the details. Think about what you require to achieve your research aims and establish if the resources and expertise are available in-house or whether you need to collaborate with another research partner or involve a professional service provider.

Early-Career Researchers

If you are an early career researcher and you'd like help with preparing for your first Fellowship application, your Research Manager can work with you to plan your application and can review aspects of your proposal, such as your training and development plan. The College's Postdoc and Fellows Development Centre also offers advice and support. The Centre provides a range courses, popup workshops and individual support, covering CV development, preparing fellowship applications and mock interviews. Additionally, clinical postdocs and PhD fellows can access the Clinical Academic Training Office for advice, best practice and information on academic careers, training and funding.

Collaborations

Most funders encourage and support collaborative research approaches, including with groups based outside of your organisation or in industry.

- #### External academic partners
  An external academic partner may provide significant intellectual contribution to the project or provide access to facilities and resources not available at your host institution. If your project involves an international research partner, it is best to involve the Research Office EU team or the International Relations Office as early as possible. As a specialised unit, they will assist with the pre-award aspects of your application, manage the Grant Agreement process and negotiate any Consortium Agreements. For major collaborative projects involving multiple partners, you are strongly encouraged to liaise with the Research Project Management Office (RPM). They are able to provide consortium management and co-ordinate partners, supporting the PI with the administrative tasks associated with these programmes. Please note, that if you are leading on an international grant application, then it is compulsory that the RPM office manage the award and you will need to obtain approval from the Faculty of Medicine. Your Research Manager will be able to provide additional information on this process.

- #### Commercial partners
  The College's industry partnerships and commercialisation team can provide support when forming collaborative research with industry. In addition to helping to connect

researchers with industrial contacts, Imperial Consultants can negotiate contracts, including intellectual property agreements, with commercial partners. Most funders are encouraging of commercial partnerships, as this is an effective route towards translation, but it is essential that any intellectual property arising from such collaborations is appropriately protected. They will usually expect the industrial partner to provide a minimum contribution, which is dependent on the nature of the research and on the intellectual property arrangements between the academic and industrial partners.

- ## NHS partners
  Collaborative, multidisciplinary approaches to research are encouraged, and involving NHS partners in your proposal may increase the impact of your work and accelerate translation. Where a Trust is involved in your research, it is vital to contact the appropriate teams with sufficient time, as some internal processes can take weeks to complete.

  Imperial Clinical Analytics, Research and Evaluation [(iCARE)](#) is a team which sits within Imperial College Healthcare NHS Trust. The team supports several digital health projects in Imperial, across the Northwest London population and the wider national healthcare system. When preparing these grant applications it is essential that applicants/PIs discuss the proposed project well in advance with the Research Informatics Programme Manager (ben.glampson1@nhs.net) or the Deputy Research Informatics Programme Manager (dimitri.papadimitriou@nhs.net).

Costings and Worktribe

Your Section Manager will be able to provide you with costings if you contact them at least 4 weeks before your planned submission date. For Calls with short lead times, this period is flexible but you should aim to contact your Section Manager as soon as possible. Please request only the research costs that are necessary for your project as you will need to justify your costs to the funder, and make sure you're aware what you can and cannot ask for as this will differ between funders, as well as between different Calls from the same funder.

- ## Schedule of Events Cost Attribution Template (SoECAT)
  The costs associated with NHS studies are met by different funders depending on the type of cost. Funders will usually cover only the research costs of the study. The Schedule of Events Cost Attribution Template SoECAT is a tool to ensure that Trust costs are properly attributed according to AcoRD principals and ensure that research costs are met by the funders.

  SoECATs are required for any proposal which will use NHS resources, even if it does not include excess treatment costs. An AcoRD Trust specialist from the JRO Trust team, or Local Clinical Research Network if multi-site, must check for the attribution of costs and confirm whether a full SoECAT is required by completing part of the form. This review process can take up to 20 days, so to ensure your SoECAT is approved in time for submission to the external funder, you should inform your Section Manager of your intention to use Trust resources as soon as possible. Further information, and a SoECAT process map can be found here [Initiate a Proposal | Research and Innovation | Imperial College London](#).

Experimental and Statistical Design

All funders will expect that the experimental design proposed in your application is well justified and that the methods and findings are both robust and reproducible. The College's Statistical Advisory Service is available to offer advice, support and practical help in carrying out research, writing grant applications and providing specialised research training.

- Animal Research

For proposals involving animals, the plan should be developed ensuring the study has adequate statistical power to answer your research questions. This needs to be balanced against the ethical considerations of using animals in research. It may be helpful to refer to the 3Rs principals and to use the 3Rs Hub developed by Central Biomedical Services. The hub offers a series of seminars and training courses for experimental design and power analysis.

It is also important to ensure you have the legal requirements for animal work in place before the start of your project. Before any regulated procedure is carried out, it must be part of a programme specified in a Home Office project licence and carried out only by a person holding an appropriate personal licence. Central Biomedical Services offer accredited training courses for personal license applicants and can offer guidance on the legal and ethical framework involved in the use of animals in research.

Data Management Plan

Funding bodies increasingly require that a data management plan is included in grant applications. The College recommends using DMPonline, an online tool which provides templates for all UK research funders who require a plan, as well as Imperial-specific templates and guidance. However, some funders such as the MRC and Cancer Research UK have their own template to complete – check the funding body requirements.

The research data management team can provide bespoke consultations to review your data management plan and provide advice around General Data Protection Regulation compliance. For clinical research, the Clinical Data Systems Team can develop systems to accurately collect and store data, and will continue to provide support for the duration of the study.

EDI and Research Culture

Some funders, such as the Wellcome Trust, are increasingly interested in the culture of the host organisation and how the College will support the applicant with their research – especially for doctoral applications, early-career researchers, and fellows. It is best to personalise this and discuss what to include with your Supervisor(s), mentor(s) and Research Manager, however some useful information can be found within the College's Research Culture Toolkit. The toolkit can provide support around communicating Imperial's research culture and presents the policies, practices and initiatives in place at the College, in a way that is relevant to your proposal.

Carbon offsetting

Some funders, such as the Wellcome Trust, are keen to see that the impact of any planned travel is minimised through carbon offsetting. An internal process to select a Travel Carbon Offsetting Provider for the whole College is currently in progress. In the meantime, questions about Wellcome's policy can be directed to Cindy Lai: c.lai@imperial.ac.uk

Patient and Public Involvement

Many funders (particularly publicly funded bodies) give considerable importance to the involvement of the public in developing a research proposal and this is especially important if your work involves a clinical study. Involving patients, carers, service users and lay people in your research can improve the quality of your research by contributing different perspectives and experiences. Therefore, it is a good idea to consider PPI before you start writing your proposal. The College's [Societal Engagement team](#) and the [Patient Experience Research Centre](#) provide support, advice, education and training for researchers and clinical teams around engaging with the public, setting up focus groups and patient surveys.

Ethics

Funders expect that any institution receiving research funding will adhere to their policies on governance of good research conduct and show an awareness of the ethical implications of research. It is important to ensure that any research is carried out in a manner than ensures risks to participants are minimised and justified by the expected benefits.

The [Research Governance and Integrity Team](#) supports our researchers to meet the legal, ethical and scientific obligations of healthcare research through producing guidance and templates governing the management and operational aspects of conducting clinical research. Health related research is reviewed by the [Imperial College Research Ethics Committee (ICREC)](#) and non-health related research is reviewed by the [Science, Engineering and Technology Research Ethics Committee (SETREC)](#).

Peer Review

The College encourages peer review as part of your grant application preparations. Ensuring that your application is reviewed internally prior to submission, greatly increases the chances of success as it gives you a chance to address any obvious problems or pitfalls before they are picked up by the Funder's peer review process. The science case should be evaluated by colleagues who best understand the technical aspects of the proposal, but it is important also obtain input from researchers further removed from the field as they can offer broader perspective on the project plan and its wider relevance.

Your Research Manager can help to organise peer review for your application. They have access to information on current awardees in the Faculty, as well as past and current panel members in the College. In order to benefit from this service, you must provide a draft of your full application 4 - 6 weeks before your planned submission deadline. Your Research Manager will aim to obtain 3 reviews from a range of experts, which will usually include at least 1 previously successful applicant.

- Internal MRC Shadow Panels

It is mandatory for a Research Grant or New Investigator Research Grant application to be reviewed by the internal Faculty of Medicine 'Shadow Panel' - deadlines for submission are typically 6-8 weeks before the funder submission deadline and are circulated in the FoM newsletter as well as via email.

Departmental Approval

The Head of Department is responsible for approving all proposals on behalf of the Department. They must confirm support of the proposed science, research costs (including any Departmental commitment) and availability of space, resources and infrastructure

required for the work to take place. To facilitate this process, PIs should inform their Section Manager of forthcoming proposals as early as possible.

Letter of support

Letters of support are frequently required for Calls, particularly when a Funder wants to see evidence of commitment or contributions from either the host institution or partners. A well written letter of support demonstrates the importance of the work to the supporting organisation and can help to convince the Funder that your work has strong backing.

- ### Host Institution
  Your host institution has agreed to support your work, so it is important to present as much leverage as possible. Mention any support agreed with your Department including, space, access to facilities, technical or administrative staff, equipment, financial contributions, and studentships. Your Research Manager will help draft an Institutional letter of support on behalf of the Head of Department or Provost/President if required. You must provide them with a draft copy of your application, updated CV and an email from the Department confirming support, at least 3 weeks before the JRO deadline. If the letter needs Provost/President sign off, please allow for a longer timeframe.

- ### Project Partners
  Project partners, including industry collaborators, may support your work in cash or in-kind contributions such as providing samples, data patient cohorts and access to facilities or technical expertise. This letter of support should confirm the partner's commitment to the proposed project and state the benefits of the collaboration and its impact. The full nature of the support provided should be described and the added value of the partners contribution should be clearly articulated.

- ### Use of Human Tissue
  Projects using tissue acquired from a licensed NHS tissue bank require a letter of approval from the tissue bank.

Safety

It is important that any risks involved in your research are assessed before you submit your grant application. In the early stages of planning, it probably will not be possible to undertake a full risk assessment, but you may have enough information on the project to know whether any specialist licenses, training or equipment are required and whether infectious and/or GM organisms will be used. At this stage, it would be useful to discuss your plans with your Departmental Senior Lab Manager who can help to identify the resource implications of carrying out your proposed work according to the safe working practices adopted by the Department.

If you require a piece of equipment which is not available in your group, your Departmental Senior Lab Manager can help you find out whether this equipment is already available elsewhere within the College and whether you could have access to it for your proposed work as well as identify suitable space if equipment is being purchased.