Imperial College London

POSTDOC AND FELLOWS DEVELOPMENT CENTRE

Helping research staff to succeed

Guide to writing a lay summary

Distilling your carefully thought-out research programme into simple, concise English to be accountable to the general taxpayer has become a standard part of funding and fellowship applications.

The lay summary matters - It demonstrates neatly how clear your ideas are – particularly whether you have an argument for why your work needs to be funded. But it is also of importance to the funders themselves since they commonly use lay summaries to evidence which projects they have invested in. On a practical level, your lay summary may be the only part of your application that is read by the entire panel.

You can't risk dismissing the lay summary in your funding application as a bothersome irrelevance, and you can't afford for it to miss the mark.

Golden rules

Here are five golden rules to help keep you on track.

1. Know the funder's mission and values

Don't treat all funding or fellowship schemes as if they were similar. Each scheme is particular, unique, and has its own definitions.

Get to know what a funder's mission is – where their money comes from, what factors influence the kinds of projects they want to fund. Read as much as you can find about a potential funder, not just the guidance notes for the specific scheme you're interested in. Look at their news feed and social media presence, to see what conversations they're participating in.

Study the titles and lay summaries of other projects that they have funded recently, noting the use of keywords and phrases to describe the impact.

Keep in mind that your lay summary is most likely the thing that the funder needs to persuade their own stakeholders that they're doing a good job, which means that the funder has a direct, self-interested concern for what you say. Be sure that it meets their needs if you want to get them on board.

2. Steer clear of journalism

Don't fall into the trap of making fatuous, oversized claims about the significance of your topic. This typically happens in the very first sentence: the author is attempting to show that their work is **really, really important, to everyone, everywhere**. Some funders do define impact in very broad terms; others are much more concerned with academic impact within your field – that goes back to what was said above, about understanding the mission of your particular funder.

Nobody will be impressed or persuaded by blindingly obvious statements. For example, 'Rapidly depleting fossil fuel stocks are forcing governments to look into renewable sources of energy.' Yes. Anyone who has read a newspaper in the last 20 years is aware of this. 'Cybersecurity is a core challenge facing computer scientists today.' Yes. We know.

Simple English does not mean simple thinking. Instead of journalistic clichés, focus on research on your topic.

Examples:

Bad: The consequences of anthropogenic climate change are, quite literally, a global challenge.

Better: Recent studies on the effects of man-made climate change have found that...

Bad: Lower back pain is a chronic problem affecting

many millions of people.

Better: The latest data from the NHS show that the leading cause of disability in the UK is now lower back pain: three out of four people will suffer from it at some point in their lives.

3. Tell a logical story

Focusing on the state of research on your topic enables you to tell a more coherent story, and to give yourself a more obvious place in it. If you set out a clear problem and how you plan to solve it, you have the chance to demonstrate the impact not of your generic topic, but of your specific contribution.

- Question: What is your research question? Define this in a precise, active way, e.g. instead of ambiguous phrases like 'my research focuses on...', state 'my research asks...'
- Need: Why do we need an answer to your question? This will include: what is the state of the field at the moment? What, in particular, don't we know or can't we do at present? Why is that bad?
- Approach: How do you propose to find an answer? This gives you a chance to signal the kinds of methods and/or data you will be using. In contrast to the rest of the research proposal, you won't go into detail here.
- Conclusion: What do you think your answer might look like? What are your expectations for the research? You should be able to antecipate, based on your expertise and preliminary data, what you expect to find.
- Benefits: Who will benefit from your project? The best way to conceptualise the potential impact of your project is 'a positive intent to change what somebody else is doing'. Start with academic

impact: what will others in your niche subfield need to do differently in their own work once your results have been published? Work outwards from there and don't forget to go back to the original challenge you are trying to solve.

4. Put people back in the text

A lot of academic writing is deliberately impersonal. By taking human actors out of the writing as much as possible, an implicit argument is being made for the objectivity and reproducibility of the work.

When it comes to lay summaries, the idiom you're conforming to is not 'normal in your discipline', it's 'normal every-day speech'. Sentences that have no people in them are just not how we normally speak. It's not realistic to expect a non-expert to follow a train of thought that has actions but no actors.

To fix this, put the people back in.

Examples

Bad: Critical gaps in the experimental data remain.

Better: Scientists do not yet understand...

Bad: There is significant uncertainty in the literature

about...

Better: We still don't know...

Bad: Economic data will be analysed...

Better: I will analyse...

5. Sort out your vocabulary

Not all lay summaries have to be written in plain English for the general public, but many do. For the rest, the instruction is likely to be framed more as 'for a general academic/scientific audience'. Note the word 'general'. In neither case is it going to be OK for you to use technical jargon from your tiny subfield.

To put this in context, consider these two words: *protein* and *discourse*.

- To a non-scientist, protein is not a polymeric macromolecule composed of long chains of amino acids linked by peptide bonds. It is a food group – the sort of thing you try to include in a balanced diet or purchase in the form of expensive exercise supplements.
- To someone outside cultural studies, discourse is not a politically activated system of values and ideas by which subjects are constructed. It is simply a posh way of saying 'discussion'.

You need a systematic method for deciding what is and is not jargon, because your deep emersion in your topic makes you very badly placed to judge. The best strategy is to give your lay summary to as many people as possible, from as many walks of life as possible. Don't wait until you have a funding deadline — do it now.

Examples

Bad: Epidemiological data will be analysed using statistical methods designed to reproduce the observed data, which will provide...

Better: I will analyse statistics on rates of infection in order to show how...

Bad: Pathogenic research to date has focussed on the ~1.5% of the genome that codes for protein, but the remainder is now known to be rich in functional elements that regulate protein production or encode small, non-protein molecules.

Better: Scientists looking for possible genetic causes of this disease are beginning to study many more genes – even some previously dismissed as 'junk' that are now known to be important.

Bad: Lexical and semantic variance in verbal forms of communication will always be socially and culturally conditioned with reference to the perceived socio-economic status of the interlocutor.

Better: We change how we speak depending on whom we are speaking to.

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