Writing fundable proposals – a guideline

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Before undertaking research, a research proposal is needed in order to gain funding for the work. Here are some tips on how to improve your research proposals.

Basic rules

First off, start with the right attitude in your own mind. It is entirely fair that you have to raise your own funding. This ensures that only those with genuine passion for their subject are able to sustain it. So, accept that proposal writing is just and justified, and move on from there.

Secondly, understand the importance of the task and give it due effort. It is worth putting your all into your proposal, because it is the first impression that you will make on the review panel that judges it, and the reviewers will assume that it is an indication of how you operate in the laboratory, in the classroom and in life.

Thirdly, give the reviewers what they want: a thoughtful, well-structured proposal that explains what you want to do and why, then how you plan to do it. Most reviewers of proposals undertake their reviews in their own time, and they do not want to spend their evenings and weekends ploughing through impenetrable documents that leave them puzzled and weary.

How to achieve the perfect proposal

A successful proposer understands and meets the aims of the proposal. The overarching aim of the work you are proposing is to improve the understanding of a particular subject in such a way as to benefit humankind (not to get money to keep your lab running). Think of your proposal as a TRADER statement – **T**itle, **R**ationale, **A**im broken down into objectives, what you will **D**eliver, the **E**xperimental procedure you propose to follow, and the **R**esources you will require.

Hints and tips for successful proposals

Good reviewers are hard to come by, and since most research or science councils routinely send each proposal to five or more reviewers, there is only a small chance that all of the reviewers' areas of expertise will be a 100% match for your proposal's topic. So, explain all your abbreviations and do not rely on jargon, but give the review panel enough respect that you are not explaining that water is made up of hydrogen and oxygen. The key is to make the document accessible, both in content and presentation. Write for a technical but broad audience.

General writing

If you use numbered headings do not use more than four number levels, i.e. no more than 1.1.2.2. Do not take literature and sources of information at face value, but also look at the context of the measurements reported, be especially wary of 'best', 'worst', and 'good' because those comparison words are only limited to the selection of things being compared in that particular piece of work. Make the proposal aesthetically readable as well as accessible in content. Use a locked space (also called unbroken space) in between items which must stay on the same line, such as units after numbers.

Use original, peer-reviewed references as much as you possibly can – journals instead of books, reports or conference proceedings. Never, ever use internet references unless you have an in-press journal article with a DOI. Nomenclature lists do not need to include standard abbreviations or formulae such as Cu, mg. Only list items specific to the proposal.

Reporting preliminary or literature results

In some proposals you will be building on your own previous work. In this case, make sure your team's or your contribution to the field is clear, but do not brag or fail to cite any references other than your own work. In other proposals you will be addressing gaps in the current state of knowledge. In both cases you may need to report prior learning to justify the objectives and/or methods you are proposing.

Write in third person, passive past tense, and always use SI unit and check the case (upper or lower) of the symbol.

Materials and methods

Again, the watchword is to make the document easy to understand. Illustrate the methods as a flowing sequence if there are several steps. Give information for procedures which are new or modified. Do not include standard protocols – just give references for these. Explain what each method will tell you in relation to the objectives.

Budgeting

Itemise the budget as far as you possibly can. State what the important items are to be used for: if you are asking for capital equipment for example, state which of the objectives it will enable you to achieve.

Bursaries: specify how many people you need to support and at what level. Also clarify their roles in the project. If the organisation allows it, include a line item for contingencies (up to 10% of the total budget is reasonable) and one for knowledge dissemination (for items like journal page charges and/or conference fees to enable you to publish your work). Describe any other funds sought or secured. Remember to pitch the budget at what it will realistically cost to do the work well.

Finishing touches

The last section of your proposal will be the one which aims to clinch the deal. If the proposal ends in an 'any further information' or 'concluding remarks' type of section, use the opportunity to reiterate why the community needs the new knowledge you intend to create and how well the work you have just described will enable this.

Finally, draft your proposal in plenty of time, and use all the resources at your disposal. Study the guidelines for proposers. Before you submit, send your draft review to a mentor or colleague to check.

After the submission has been made, you will receive the decision from the funding body. You may receive full funding, partial funding or a rejection. In each case, write back thanking them for the correspondence and asking for feedback if it was not already included. Nobody ever has every proposal they write funded; do not take rejection to heart too much; instead learn from it and grow. If you received full funding, congratulations, the next challenge is to make good on your promises!

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