

Grants and Funded Research Proposal Development

The purpose of this document is to elucidate the various components of a typical grant proposal. Of course, different funding opportunities have varying requirements, and proposals should be tailored accordingly. For this reason, it is always important to read the funding announcement and the accompanying guidelines very carefully. There are some useful resources online that provide guidance on how to write an effective proposal. The National Science Foundation (NSF), for example, offers the following with specific reference to the Division of Undergraduate Education (DUE), which is of particular interest to CCSU, given our status as a primarily undergraduate institution: http://www.nsf.gov/pubs/2004/nsf04016/nsf04016 1.htm

Note that the NSF guidance, while tailored to a specific division, also contains common-sense advice on how to write a good proposal. This advice includes the strength of the idea, the clarity of the writing, a realistic sense of what can be achieved within a discrete timeframe, extensive knowledge of current scholarship in your field, and a reasonable budget. NSF also requires applicants to describe what they call the "intellectual merit" and "broader impacts" of the proposal. These criteria are specific to NSF, but they are useful in thinking about proposals to other sponsors as a way of framing your research or program idea. The following document, written by Susan Finger at Carnegie Mellon University, and also concentrating on NSF, is also a useful touchstone for developing effective proposals.

While proposals to different sponsors will vary in format and requirements, there are some common elements we can assume will be required:

-- Abstract/Executive Summary

http://www.cs.cmu.edu/~sfinger/advice/advice.html

- -- Narrative
- -- References/Works Cited
- -- Budget
- -- Budget Justification
- -- Letters of Support
- -- Subcontracts
- -- Representations & Certifications
- -- Grant Application Checklist

Abstract/Executive Summary

This document is, as the various names for it suggest, a synopsis of your project. This is what some people informally describe as an "elevator pitch," in other words the short version of your proposal that you would use to explain your idea to someone if you only had their attention for the duration of an elevator ride. This document will often (in fact almost always) be written after the main proposal narrative has been completed. This is where you distil your idea into a paragraph or a page, so that reviewers, who may be reading a large number of proposals, can get a brief overview of your idea. It makes sense to wait until the narrative has been written to craft this document because you can excerpt the high points of your narrative to form the capsule summary, rather than having to invent an entirely new document. You should also have a very strong sense of what your idea is once you have lived with the narrative for an extended period of time.

Project Narrative

The project narrative contains all the main components of your research idea. The format of this document will vary depending on sponsor requirements, but you should pay very close attention to those requirements in order not to disqualify your application. This includes such apparently minor details as font, pagination and length. NSF, for example, allows you 15 pages and no more, with a font size of 10 or 11, depending on the font you choose (there are only a handful of allowable fonts). Please be aware that proposals can and will be rejected for not following these formatting requirements.

Once you know how much space you have to work with, you will then also have a better sense of how to fit all of the required submission material into that space. For example, here is the structure of a typical proposal narrative (note that your proposal might not look exactly like this, nor might your narrative be organized in precisely this order – this is just to provide a general overview of what a proposal narrative might look like):

- -- Background/Context/Need
- -- Objectives/Outcomes
- -- Research Description
- -- Work Plan/Milestones
- -- Evaluation & Dissemination

Background/Context/Need

This is the part of the proposal that frames your project/idea. You may refer to existing scholarship, the state of research in this area, why this particular project/idea is important. Depending on the nature of your project (for example, an application for funds to support college access for students in particular need), you may need to provide statistical data to justify the need for funding.

Objectives/Outcomes

What will your research achieve? Even if you cannot predict the precise outcome of your research (because variables are an inherent part of research), what question are you trying to answer, and how do you anticipate being able to demonstrate the success of your attempt to answer that question?

Research Description

This is the heart of your proposal. What will you be doing? What methods will you employ? What resources will you require? Who is on your research team? What are their credentials? What is the timeline (see next section) for this research to be accomplished?

Work Plan/Milestones

Sometimes this part of the proposal requires a separate section. Some sponsors like to see a project management plan, along with an accompanying explanation of how resources will be used during various phases of the project. This ties work to time and to money, so that reviewers can see you have thought about how your work will progress and how you intend to spend their money, even if it is still a best guess at this stage.

Evaluation & Dissemination

It is more and more common for grantors to request information about how you intend to evaluate the success of your research or your program. They will often also require that you build professional evaluation services into your budget. The industry rule--of--thumb for this has generally tended to be around 8% of your total project costs, but this can vary depending on the circumstances. Sponsors will also sometimes wish to see a plan for dissemination of your results (publication, data management, open source warehouse storage of results, etc.).

References/Work Cited

This is almost self-explanatory, except to say that sometimes recipients of proposals use this document to determine a) whom to ask to review your application and b) whether you have demonstrated knowledge of current and historical research in your field.

Budget & Budget Narrative

Please see the separate <u>Budget document</u> for an extensive articulation of budget development. This activity will be performed by the Office of Grants & Funded Research, in consultation with the Principal Investigator/Program Director.

Letters of Support

If you plan to collaborate with external partners, or avail yourself of resources contributed by third parties, you should also plan to provide letters of support to document those partnerships.

Some sponsors also ask for an institutional letter of support from a chair, dean, or provost. Bear in mind that we need a sufficient amount of lead time to secure such letters of support.

Subcontracts

Sometimes your work will require a formal collaboration with a colleague or team of colleagues at another institution. In such cases, the collaborating party should provide a discrete scope of work and budget, along with any necessary letters of support from their own institution. The Office of Grants & Funded Research will work with their research administration counterparts at the collaborating institution to secure such documents and commitments.

Representations & Certifications

This is a boilerplate set of attestations, usually signed by an authorized institutional signatory, that covers a range of issues that often pertain to federal regulations about workplace safety, lobbying, and so on. The Office of Grants & Funded Research will secure the appropriate signatures for this set of attestations.

Grant Application Checklist

Individual sponsors will often provide a checklist to help ensure that all the required components of the proposal have been completed (and uploaded, if the application is electronic). The Office of Grants & Funded Research will verify your application against such a checklist to ensure that your proposal packet is complete and that your application can be successfully submitted. This is often not something that applicants are required to complete and submit, but rather an *aide-memoire* for the applicant to double-check that everything is done as it should be.