

GRANT PROPOSALS

What This Handout is About...

This handout will help you write and revise grant proposals for research funding in all academic disciplines (hard sciences, social sciences, humanities, and the arts). It's targeted primarily to graduate students and faculty although it will be helpful to undergraduate students who are seeking funding for research (e.g. for their senior thesis).

The Grant Writing Process

Grant writing varies widely across the disciplines and research intended for epistemological purposes (philosophy or the arts) rests on very different assumptions than research intended for practical applications (medicine or social policy research). Nonetheless, this handout attempts to provide a general introduction to grant writing across the disciplines.

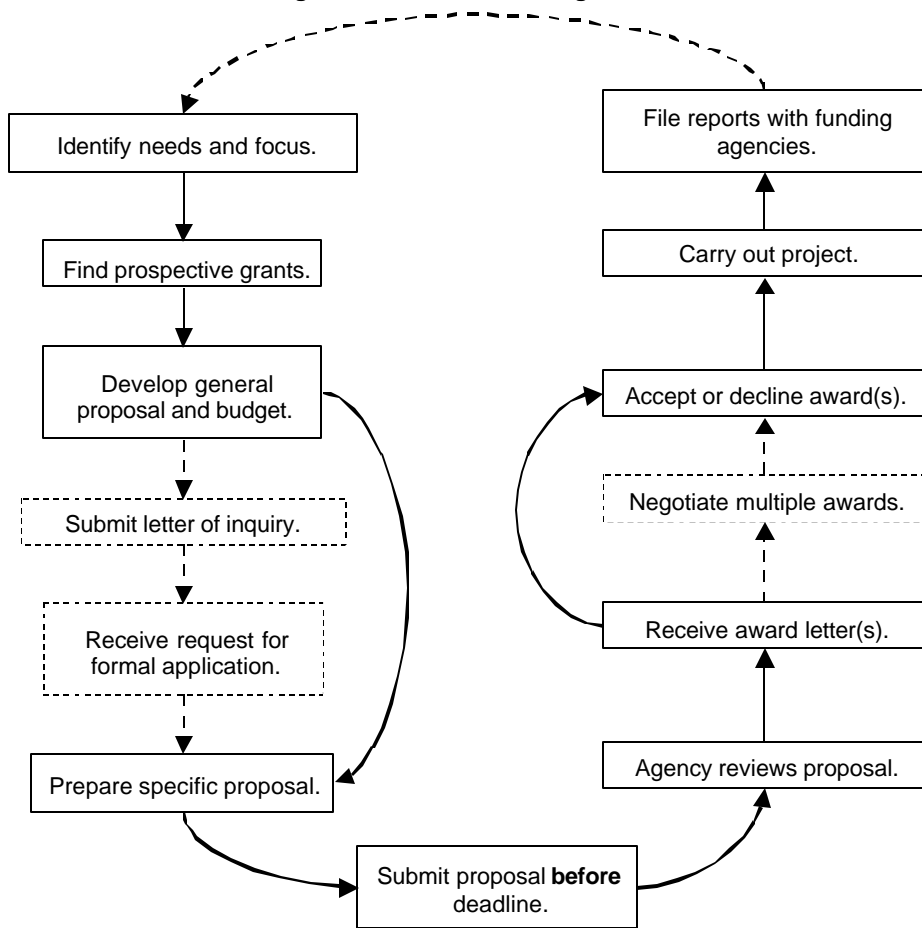
Although some folks in the humanities and arts may not have thought about their projects in terms of research design, hypotheses, research questions, or results, reviewers and funding agencies expect you to frame your project in these terms. Learning the language of grant writing can be a lucrative endeavor, so give it a try. You may also find that thinking about your project in these terms reveals new aspects of it to you.

Writing successful grant applications is a long process that begins with an idea. Although many people think of grant writing as a linear process (from idea to proposal to award), it is a circular process. Diagram 1 below provides an overview of the grant writing process and may help you plan your proposal development.

Applicants must write grant proposals, submit them, receive notice of acceptance or rejection, and then revise their proposals. Unsuccessful grant applicants must revise and resubmit their proposals during the next funding cycle. Successful grant applications and the resulting research lead to ideas for further research and new grant proposals.

Cultivating an ongoing, positive relationship with funding agencies may lead to additional grants down the road. Thus, make sure you file progress reports and final reports in a timely and professional manner. Although some successful grant applicants may fear that funding agencies will reject future proposals because they've already received "enough" funding, the truth is that money follows money. Individuals or projects awarded grants in the past are more competitive and thus more likely to receive funding in the future.

Diagram 1. The Grant Writing Process



----- Dashed lines indicate possible additional steps.

Some General Tips

1. Begin early.
2. Apply early and often.
3. Don't forget to include a cover letter with your application.
4. Answer all questions. (Pre-empt all questions.)
5. If rejected, revise your proposal and apply again.
6. Give them what they want. Follow the application guidelines **exactly**.
7. Be explicit and specific.
8. Be realistic in designing the project.
9. Make explicit the connections between your research questions and objectives, your objectives and methods, your methods and results, and your results and dissemination plan.
10. Follow the application guidelines **exactly**. (I have repeated this tip because it is very, **very** important.)

Before You Start Writing

Identify Your Needs and Focus

First, identify your needs. Answering the following questions may help you:

- Are you undertaking preliminary or pilot research in order to develop a full-blown research agenda?
- Are you seeking funding for dissertation research? Pre-dissertation research? Postdoctoral research? Archival research? Experimental research? Fieldwork?
- Are you seeking a stipend so that you can write a dissertation or book? Polish a manuscript?
- Do you want a fellowship in residence at an institution that will offer some programmatic support or other resources to enhance your project?
- Do you want funding for a large research project that will last for several years and involve multiple staff members?

Next, think about the focus of your research/project. Answering the following questions may help you narrow it down:

- What is the topic? Why is this topic important?
- What are the research questions that you're trying to answer? What relevance do your research questions have?
- What are your hypotheses?
- What are your research methods?
- Why is your research/project important? What is its significance?
- Do you plan on using quantitative methods? Qualitative methods? Both?
- Will you be undertaking experimental research? Clinical research?

Once you have identified your needs and focus you can begin looking for prospective grants and funding agencies.

Finding Prospective Grants and Funding Agencies

Whether your proposal receives funding will rely in large part on whether your purpose and goals closely match the priorities of granting agencies. Locating possible grantors is a time consuming task, but in the long run it will yield the greatest benefits. Even if you have the most appealing research proposal in the world, if you don't send it to the right institutions, then you're unlikely to receive funding.

There are many sources of information about granting agencies and grant programs. Most universities and many schools within universities have Offices of Research, whose primary purpose is to support faculty and students in grant-seeking endeavors. These offices usually have libraries or resource centers to help people find prospective grants.

At UNC, the Research at Carolina office coordinates research support <<http://research.unc.edu/>>.

The GrantSource Library <http://gradschool.unc.edu/fellowship_and_funding/index.html>, located in Bynum Hall, provides grant-seeking assistance to UNC students and faculty. The GrantSource Library maintains a wide variety of resources (books, journals, and online databases) and offers workshops to help students and faculty find funding.

The UNC Medical School and the School of Public Health each have their own Offices of Research (UNC Medical School Office of Research <<http://www.med.unc.edu/wrkunits/1dean/rschofc/>> and UNC School of Public Health Office of Research <<http://www.sph.unc.edu/research/>>).

Writing Your Proposal

Audience

The majority of grant programs recruit academic reviewers with knowledge of the disciplines and/or program areas of the grant. Thus, when writing your grant proposals, assume that you are addressing a colleague who is knowledgeable in the general area, but who does not necessarily know the details about your research questions.

Remember that most readers are lazy and will not respond well to a poorly organized, poorly written, or confusing proposal. Be sure to give readers what they want. Follow all the guidelines for the particular grant you are applying for. This may require you to reframe your project in a different light or language. Reframing your project to fit a specific grant's requirements is a legitimate and necessary part of the process unless it will fundamentally change your project's goals or outcomes.

Final decisions about which proposals are funded often come down to whether the proposal convinces the reviewer that the research project is well planned and feasible and whether the investigators are well qualified to execute it. Throughout the proposal, **be as explicit as possible**. Predict the questions that the reviewer may have, and answer them. Przeworski and Salomon (1995) note that reviewers read with three questions in mind:

- What are we going to learn as a result of the proposed project that we do not know now? (goals, aims, and outcomes)
- Why is it worth knowing? (significance)
- How will we know that the conclusions are valid? (criteria for success) (2)

Be sure to answer these questions in your proposal. Keep in mind that the reviewer may not read every word of your proposal. She may only read the abstract, the sections on research design and methodology, the vitae, and the budget. Make these sections as clear and straight forward as possible.

Style

The way you write your grant will tell the reviewers a lot about you (Reif-Lehrer 82). From reading your proposal, the reviewers will form an idea of who you are as a scholar, researcher,

and as a person. They will decide whether you are creative, logical, analytical, up-to-date in the relevant literature of the field, and, most importantly, capable of executing the proposed project. Allow your discipline and its conventions to determine the general style of your writing, but allow your own voice (and personality) to come through. Be sure to clarify your project's theoretical orientation.

Develop a general proposal and budget

Because most proposal writers seek funding from several different agencies or granting programs, it is a good idea to begin by developing a general grant proposal and budget. This general proposal is sometimes called a "white paper." Your general proposal should explain your project to a general academic audience. Before you submit proposals to different grant programs, you will tailor a specific proposal to their guidelines and priorities.

Organizing your proposal

Although each funding agency will have its own (usually very specific) requirements, there are several elements of a proposal that are fairly standard and they often come in the following order:

- Title Page
- Abstract
- Introduction (Statement of the Problem, Purpose of Research or Goals, and Significance of Research)
- Literature Review
- Project Narrative (Methods, Procedures, Objectives, Outcomes or Deliverables, Evaluation, and Dissemination)
- Personnel
- Budget and Budget Justification

Format the proposal so that it is easy to read. Use headings to break the proposal up into sections. If it is long, include a table to contents with page numbers.

Title Page: The title page usually includes a brief (yet explicit) title for the research project, the names of the principle investigator(s), the institutional affiliation of the applicants (the department and university), name and address of the granting agency, project dates, amount of funding requested, and signatures of university personnel authorizing the proposal (when necessary). Most funding agencies have specific requirements for the title page; make sure to follow them.

Abstract: The abstract provides readers with their first impression of your project. To remind themselves of your proposal, readers may glance at your abstract when making their final recommendations, so it may also serve as their last impression of your project. The abstract should explain the key elements of your research project in the future tense. Most abstracts state: (1) the general purpose, (2) specific goals, (3) research design, (4) methods, and (5) significance (contribution and rationale). Be as explicit as possible in your abstract. Use statements such as, "The objective of this study is to ..."

Introduction: The introduction should cover the key elements of your proposal, including a statement of the problem, the purpose of research, research goals or objectives, and significance of the research. The statement of problem should provide a background and rationale for the project and establish the need and relevance of the research. How is your project different from previous research on the same topic? Will you be using new methodologies or covering new theoretical territory? The research goals or objectives should identify the anticipated outcomes of the research and should match up to the needs identified in the statement of problem. List only the principle goal(s) or objective(s) of your research and save sub-objectives for the project narrative.

Literature Review: Many proposals require a literature review. Reviewers want to know whether you've done the necessary preliminary research to undertake your project. Literature reviews should be selective and critical, not exhaustive. Reviewers want to see your evaluation of pertinent works. For more on literature reviews, see the Writing Center handout <http://www.unc.edu/depts/wcweb/handouts/literature_review.html>.

Project Narrative: The project narrative provides the meat of your proposal and may require several subsections. The project narrative should supply all the details of the project, including a detailed statement of problem, research objectives or goals, hypotheses, methods, procedures, outcomes or deliverables, and evaluation and dissemination of the research.

For the project narrative, pre-empt and/or answer all of the reviewers' questions. Don't leave them wondering about anything. For example, if you propose to conduct unstructured interviews with open-ended questions, be sure you've explained why this methodology is best suited to the specific research questions in your proposal. Or, if you're using item response theory rather than classical test theory to verify the validity of your survey instrument, explain the advantages of this innovative methodology. Or, if you need to travel to Valdez, Alaska to access historical archives at the Valdez Museum, make it clear what documents you hope to find and why they are relevant to your historical novel on the '98ers in the Alaskan Gold Rush.

Clearly and explicitly state the connections between your research objectives, research questions, hypotheses, methodologies, and outcomes. As the requirements for a strong project narrative vary widely by discipline, consult a discipline-specific guide to grant writing for some additional advice.

Personnel: Explain staffing requirements in detail and make sure that staffing makes sense. Be very explicit about the skill sets of the personnel already in place (you will probably include their Curriculum Vitae as part of the proposal). Explain the necessary skill sets and functions of personnel you will recruit. To minimize expenses, phase out personnel who are not relevant to later phases of a project.

Budget: The budget spells out project costs and usually consists of a spreadsheet or table with the budget detailed as line items and a budget narrative (also known as a budget justification) that explains the various expenses. Even when proposal guidelines do not specifically mention a

narrative, be sure to include a one or two page explanation of the budget. To see a sample budget, turn to Example #1 at the end of this handout.

Consider including an exhaustive budget for your project, even if it exceeds the normal grant size of a particular funding organization. Simply make it clear that you are seeking additional funding from other sources. This technique will make it easier for you to combine awards down the road should you have the good fortune of receiving multiple grants.

Make sure that all budget items meet the funding agency's requirements. For example, all U.S. government agencies have strict requirements for airline travel. Be sure the cost of the airline travel in your budget meets their requirements. If a line item falls outside an agency's requirements (e.g. some organizations will not cover equipment purchases or other capital expenses), explain in the budget justification that other grant sources will pay for the item.

Many universities require that indirect costs (overhead) be added to grants that they administer. Check with the appropriate offices to find out what the standard (or required) rates are for overhead. Pass a draft budget by the university officer in charge of grant administration for assistance with indirect costs and costs not directly associated with research (e.g. facilities use charges).

Timeframe : Explain the timeframe for the research project in some detail. When will you begin (and complete) each step? It may be helpful to reviewers if you present a visual version of your timeline. For less complicated research, a table summarizing the timeline for the project will help reviewers understand and evaluate the planning and feasibility. Turn to Example #2 at the end of this handout.

For multi-year research proposals with numerous procedures and a large staff, a time line diagram can help clarify the feasibility and planning of the study. Turn to Example #3 at the end of this handout.

Revising your Proposal

Strong grant proposals take a long time to develop. Hopefully, you will have started the process early and will have time to get feedback from several readers on different drafts. Seek out a variety of readers, both specialists in your research area and non-specialist colleagues. You may also want to seek out assistance from knowledgeable readers on specific areas of your proposal. For example, you may want to schedule a meeting with a statistician to help revise your methodology section. Don't hesitate to seek out specialized assistance from the relevant research offices on your campus. At UNC, the Odum Institute <<http://www2.irss.unc.edu/irss/home.asp>> provides a wide variety of assistance to graduate students and faculty in the social sciences.

In your revision and editing, ask your readers to give careful consideration to whether you've made explicit the connections between your research objectives and methodology.

- Have you presented a compelling case?

- Have you made your hypotheses explicit?
- Does your project seem feasible? Is it overly ambitious? Does it have other weaknesses?
- Have you stated the means that grantors can use to evaluate the success of your project after you've executed it?

If a granting agency lists particular criteria used for rating and evaluating proposals, be sure to share these with your own reviewers.

Some Closing Advice

Some of us may feel ashamed or embarrassed by asking for money or promoting ourselves. Often, these feelings have more to do with our own insecurities than problems in the tone or style of our writing. If you're having trouble because of these types of hang-ups, the most important thing to keep in mind is, "It never hurts to ask." If you never ask for the money, they'll never give you the money. Besides, the worst thing they can do is say, "No."

UNC Resources for Proposal Writing

Research at Carolina <<http://research.unc.edu>>

Research at Carolina – Services for Researchers <<http://research.unc.edu/services/>>

The Odum Institute for Research in the Social Sciences
<<http://www2.irss.unc.edu/irss/home.asp>>

Grant Services of the Odum Institute
<<http://www2.irss.unc.edu/irss/grantservices/grantservicesindex.asp>>

The GrantSource Library <<http://research.unc.edu/grantsource/index.html>>

UNC Medical School Office of Research <<http://www.med.unc.edu/wrkunits/1dean/rschofc/>>

UNC School of Public Health Office of Research <<http://www.sph.unc.edu/research/>>

Other Resources for Proposal Writing

Grantwriting Tips from the Donors Forum of Wisconsin <<http://www.dfwonline.org/resources-grantwritingtips.asp>>

Proposal Writing Online Short Course from the Foundation Center
<<http://fdncenter.org/learn/shortcourse/prop1.html>>

Guide for Writing a Funding Proposal by S. Joseph Levine
<<http://www.learnerassociates.net/proposal/>>

Detailed guide to proposal writing for the social sciences.

Science Magazine: Guide to Grants and Grantwriting

<http://nextwave.sciencemag.org/cgi/content/full/1999/09/20/2?session_id=295327&CFID=287145&CFTOKEN=97440275>

Advice for grant writing in the physical sciences.

Sources

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Example #1. Sample Budget

<u>Item</u>	<u>Quantity</u>	<u>Cost</u>	<u>Sub Total</u>	<u>Total</u>
<u>Jet Travel:</u>				
RDU - Kigali (roundtrip)	1		\$6,100	\$6,100
<u>Maintenance Allowance</u>				
Rwanda	12 months	\$1,899	\$22,788	\$22,788
<u>Project Allowance</u>				
Research Assistant/Translator	12 months	\$400	\$4,800	
Transportation within country				
-- Phase 1	4 months	\$300	\$1,200	
-- Phase 2	8 months	\$1,500	\$12,000	
Email	12 months	\$60	\$720	
Audio cassette tapes	200	\$2	\$400	
Photographic & slide film	20	\$5	\$100	
Laptop Computer	1		\$2,895	
NUD*IST 4.0 Software	1		\$373	
Etc.				
Total Project Allowance				\$35,238
Administrative Fee				\$100
Total				\$65,690
Sought from other sources				(\$15,000)
Total Grant Request				\$50,690

Jet Travel \$6,100

This estimate is based on the commercial high season rate for jet economy travel on Sabena Belgian Airlines. No U.S. carriers fly to Kigali, Rwanda. Sabena has student fare tickets available which will be significantly less expensive (approximately \$2,000).

Maintenance Allowance \$22,788

Based on the Fulbright-Hays Maintenance Allowances published in the grant application guide.

Research Assistant/Translator \$4,800

The research assistant/translator will be a native (and primary) speaker of Kinyarwanda with at least a four-year university degree. She will accompany the primary investigator during life history interviews to provide assistance in comprehension. In addition, she will provide commentary, explanations, and observations to facilitate the primary investigator in participant observation. During the first phase of the project in Kigali, the research assistant will work forty hours a week and occasional overtime as needed. During phase two and three in rural Rwanda, the assistant will stay with the investigator overnight in the field when necessary. The salary of \$400 per month is based on the average pay rate for individuals with similar qualifications working for international NGO's in Rwanda.

Transportation within country, Phase one \$1,200

The primary investigator and research assistant will need regular transportation within Kigali by bus and taxi. The average taxi fare in Kigali is \$6-8 and bus fare is \$.15. This figure is based on an average of \$10 per day in transportation costs during the first project phase.

Transportation within country, Phases two and three \$12,000

Project personnel will also require regular transportation between rural field sites. If it is not possible to remain overnight, daily trips will be necessary. The average rental rate for a 4x4 vehicle in Rwanda is \$130 per day. This estimate is based on an average of \$50 per day in transportation costs for the second and third project phases. These costs could be reduced if an arrangement could be made with either a government ministry or international aid agency for transportation assistance.

Email \$720

The rate for email service from RwandaTel (the only service provider in Rwanda) is \$60 per month. Email access is vital for receiving news reports on Rwanda and the region as well as for staying in contact with dissertation committee members and advisors in the United States

Audiocassette tapes \$400

Audiocassette tapes will be necessary for recording life history interviews, musical performances, community events, story telling, and other pertinent data.

Photographic & slide film \$100

Photographic and slide film will be necessary to document visual data such as landscape, environment, marriages, funerals, community events, etc.

Laptop Computer \$2,895

A laptop computer will be necessary for recording observations, thoughts, and analysis during research project. Price listed is a special offer to UNC students through the Carolina Computing Initiative.

NUD*IST 4.0 Software \$373.00

NUD*IST, “Nonnumerical, Unstructured Data, Indexing, Searching, and Theorizing,” is necessary for cataloging, indexing, and managing field notes both during and following the field research phase. The program will assist in cataloging themes that emerge during the life history interviews.

Administrative fee \$100

Fee set by Fulbright-Hays for the sponsoring institution.

Example #2: Project Timeline in Table Format

Exploratory Research	Completed
Proposal Development	Completed
Ph.D. qualifying exams	Completed
Research Proposal Defense	Completed
Fieldwork in Rwanda	Oct. 1999 – Dec. 2000
Data Analysis & Transcription	Jan. 2001 – March 2001
Writing of Draft Chapters	March 2001 – Sept. 2001
Revision	Oct. 2001 – Feb. 2002
Dissertation Defense	April 2002
Final Approval & Completion	May 2002

