



GRANT WRITING GUIDE

GRANT WRITING

“*How do you envision getting grants for your research?*” This has become an increasingly common question posed to candidates on the academic job market. As university budgets shrink and departmental resources dwindle, grant writing has become a necessary skillset for doctoral students to hone for several reasons.

First, grants are an essential component of a competitive academic record. A list of awarded grants and fellowships evidence a strong dissertation project that has been vetted by more than just your dissertation committee. In many ways, securing a major grant has become shorthand for an intellectually sound project.

Second, grants usually offer funding, which provide financial support and offset the need for (additional) debt or student loans. In the age of budget cuts, a record of grant funding signals that you can successfully support your research projects with external funds.

Finally, grants beget grants. Believe it or not, but there has been research conducted on the “Matthew effect” of accumulated advantage, whereby the rich get richer and the poor get poorer. When it comes to grant writing, studies show that early successes increase the likelihood of future successes, partly because successful grantees continue to apply for subsequent grants while nonwinners grow disheartened and cease competing.

KEEP YOUR READER IN MIND

Luckily, when writing a grant, you need not reinvent the wheel because there are myriad resources that detail how to successfully write a grant proposal. In addition, the [Writing Center previously published](#) a piece on the fundamentals of grant writing. Rather than rehash already dispensed advice, this guide will highlight one important aspect of effective grant writing - namely, writing with your audience in mind.

Recall that if you are applying for a grant, there are likely hundreds, if not thousands of other applicants competing for the same funding. This means that the selection committee will be wading through hundreds, if not thousands of grant proposals. Therefore, keeping this presumably tired and overwhelmed reader in mind will strengthen your writing. If the reader is to fund you, then they must understand the merits of your proposal. And if the reader is to understand the merits of your proposal, then you must understand what a tired and overwhelmed reader needs.

The enumerated tips provide some helpful reminders of how to write a grant while keeping your reader in mind:

- *First things first* – the first sentence of a paragraph should let the reader know what to expect.
- *Save the best for last* – the last sentence of a paragraph should stress the significance of any claims made.

- *Context* – be sure to provide context for your reader before asking them to consider anything new.
- *One-minute test* - after an initial draft, do a cursory reading by setting a timer for one minute and skim over your grant proposal. What stands out?
- *Mind the gap* – be sure to identify a gap that needs to be filled and highlight how you fill that gap. With whom are you in conversation?

TEMPLATE

Dr. Karen Kelsky, of *The Professor Is In* fame, published a “Foolproof Research Proposal Template” that has successfully won grant money for multiple graduate students and scholars over the years. (See below).

ANNOTATED GRANT

Using Dr. Kelsky’s proposal template, the following sample from Harvard University is annotated to display the extent to which each component was successfully addressed. (See below).

FURTHER READING

- Bol, Thijs, Mathijs de Vaan, and Arnout van de Rijt. 2018. “The Matthew Effect in Science Funding.” *Proceedings of the National Academy of Sciences* 115(19):4887-4890.
- Gopen, George D. and Judith A. Swan. 1990. “The Science of Scientific Writing.” *American Scientist* 78(6): 550-558.
- Porter, Robert. 2007. “Why Academics Have a Hard Time Writing Good Grant Proposals.” Retrieved from <https://www.tamtu.edu/gradschool/grant/documents/WritingGoodGrantProposals.pdf>
- Kelsky, Karen. 2015. *The Professor Is In: The Essential Guide to Turning Your Ph.D. into a Job*. New York: Three Rivers Press. (Shortened format available at <https://theprofessorisin.com/2011/07/05/dr-karens-foolproof-grant-template/>)
- Verba, Cynthia. 2017. “Scholarly Pursuits: A Guide to Professional Development during the Graduate Years.” *Harvard University: The Graduate School of Arts and Sciences*. Retrieved from https://gsas.harvard.edu/sites/default/files/atoms/files/FINAL_Scholarly%20Pursuits%20Fall%202017.pdf

THE WRITING CENTER

"THE FOOLPROOF RESEARCH PROPOSAL TEMPLATE"

LARGE GENERAL TOPIC OF WIDE INTEREST

(Global Warming, Immigration, Concert, etc.)

Brief Ref. to Literature I

Brief Ref. to Literature II

"However, scholars in these fields have not yet adequately addressed xxx..."



Gap in Knowledge

1. **Urgency:** This is bad!
2. **Hero Narrative:** I will fill this gap!



Your Research Question

"I am applying to XXX to support my research on XXX"



Specifics of Your Research

(Background info, location, history, context, limitations, etc.)



Literature Review

(Multi-page, thorough, accurate, relevant)



Methodology

(Discipline Specific)



Timeline

(Month by month plan)



Budget

(Realistic and legitimate expenses)



STRONG CONCLUSION!

("I expect this research to contribute to debates on xxx.")

Source: Karen Kelsky, Ph.D., McNair Scholars Program, University of Oregon

ALL THIS IN THE FIRST 2 PARAGRAPHS

AS MANY PAGES AS THEY ALLOW AND NO MORE

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Proposed Plan of Research – Ralph Waverly¹

Reference to Literature ↩

In the last several years I have developed two main areas of investigation: One, I am interested in the history of scientific diagrams (including maps) for what they tell us of the history of visualization and theories of representation, and two, I am interested in the more physical spaces of science, including natural history museums, hospitals, and laboratories. Since the last years of my undergraduate degree at Rice, I have been focusing on the intersections of science and architecture. I completed my BA in two major fields – architecture and civil engineering – and thus have a firm background in both the humanities and the natural sciences. Outside of school, I gained experience in both architecture and experimental physics. At no time did I try to separate my practical training in either field from my more scholarly interests in their overlap, and I have continued this inter-disciplinary interest by constructing a dual PhD program at Harvard, enrolling in both the History of Science and History of Architecture & Urban Planning programs. (I will fulfill the course and general examination requirements of both departments, and write one dissertation. My committee will include professors from both fields.)

One topic that particularly interests me is the development of American laboratories in the late nineteenth and twentieth centuries. Laboratories have existed in several contexts – from the work of individual inventors and corporate R&D to academic departments and governmental agencies – and their design has shown several changing influences, including industrial factories, high modernism, traditional campus planning, and even New Urbanism. I am interested in who or what has been responsible for the changing idea of what a laboratory should be: To what extent has laboratory design been aligned with the changing needs of science? How have laboratories influenced what it means to do scientific work and the persona of the scientist? How has their design been determined by changes in institutional and financial support? Have architects' ideas had a demonstrable impact on how scientists view their own work? These questions have no straightforward answers, and one of the goals of my work would be to investigate the overlaps and dialogues that challenge the assumptions of any purely scientific or architectural history.

Research Questions ↩

Specifics of Research ↩

I have already looked at a specific case in some depth: the design of the new laboratories for the National Bureau of Standards in the mid-1960s. Here neither the Bureau's decision to move to a new laboratory complex nor the specific design of the new buildings can be seen as the product of any one set of decisions. Changing management practices, huge increases in funds and personnel, national policies of industrial dispersion, and the specifically architectural ideas of the laboratory designers all combined in the eventual campus in suburban Maryland. The history of the NBS labs does not lend itself to any kind of internalist history (either scientific or architectural), and I thus became interested in the idea of a larger postwar military-industrial-corporate-academic complex – where “complex” is understood as both an institutional association and a physical place. Not only were the physical sciences expanding and becoming more connected with military funding sources like the Atomic Energy Commission or the Office of Naval Research, but the same architectural firms were designing similar laboratories for corporations, universities, and governmental agencies – I am particularly interested in the work of large firms like Voorhees Walker Foley & Smith or Skidmore Owings & Merrill.

Gap in the Knowledge ↩

My larger project would continue these kinds of questions, but expand them to include other important moments. In the late nineteenth century, the relationship between the first corporate labs and the development of national systems of standards seems especially important, as does the marriage between the German idea of the research university and the specifically American tradition of campus planning. In the twentieth century, I want to investigate the appropriateness of an idea like the military-

¹ Note how this candidate is prepared to give considerable detail on one principal project, where he has already done research, but also keeps the door open to a larger project and additional research questions of interest to him, to be pursued in graduate school. This insertion of the larger picture helps considerably to enhance the significance of the more detailed project.

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industrial-corporate-academic complex, and explore the connections between funding, scientific pedagogy, specific architectural firms, and the various sites of scientific work. I am also interested in how the fragmentation of science in the 1970s and 1980s is related to an architectural disenchantment with large-scale modernist planning.

Literature Review

Other scholars have approached the question of the laboratory, and my own project would build on this existing work. There is a rich literature in the history of science on experimental practice and the rise of laboratory authority from the seventeenth to the twentieth century. There have also been several studies of the laboratory design of famous architects like Robert Venturi, Eero Saarinen, or Louis Kahn, by both historians of science and of architecture. Detailed histories of specific laboratories, such as the Lawrence Berkeley Lab or the German Physikalisch-Technische Reichsanstalt, will also be important as models of institutional history. Yet almost all of this work has been situated either within either the history of science or the history of architecture, and has thus been divided in both focus and method. Since my goal is to bridge between architectural and scientific histories, my dissertation would involve a great deal of new archival research.

Methodology

I would mainly use two types of archives: those of individual laboratories or institutions (both governmental and academic), and those of architectural firms who have worked on laboratory design. I will look for planning documents, correspondence between scientists and architects, and architectural drawings showing the evolution of design ideas. Announcements and reviews in the journals of both the scientific and architectural community will also be important. In analyzing these sources, I would use both techniques of textual analysis and the formal analysis used by historians of architecture and urban planning; an important part of my training has been learning to read drawings and photographs for the ideas and arguments they contain. My view of the laboratory as a joint project of both scientists and architects will impact my methodology – both texts and drawings will be important. This dual focus will be vital to understanding the military-industrial-corporate-academic complex as something more than simply a first-order effect of increased military funding: engaging different kinds of archives and types of sources will enable me to understand laboratory history as a larger cultural development with roots in several traditions, and I will be able to trace the consequences of its design into wider social contexts.

Strong Conclusion