Intensive Course in Research Writing

Barbara Gastel, MD, MPH Texas A&M University Summer 2016 Intensive Course in Research Writing: Session 9 (8 July 2016)

Main Items Today

- Presentations by two class members
- Presentation/discussion (to be continued on Monday): preparing grant proposals and progress reports

Presentations by Class Members

Announcements etc

- Writing due Monday: draft of introduction
- Reading due Monday: none, but can read ahead
- Looking ahead: writing assignments for the rest of next week

Preparing Grant Proposals and Progress Reports

The Grant Application Process: An Overview

Seeking a Possible Match: Two Approaches

- Identifying something you wish to do and then seeking a suitable funding source
- Looking for a request for proposals in your field and then developing a proposal that meets the criteria
- (Note: Sometimes a request for proposals has another name, such as *call for proposals* or *program announcement*.)

Preparing to Write the Proposal

- · Reading instructions carefully
- Consulting a program officer, if appropriate
- Researching the literature
- Doing preliminary studies, if applicable
- Contacting potential collaborators, if any
- Determining expected costs
- Other

Writing and Submitting the Proposal

- If requested, submitting a letter of intent or pre-proposal
- · Drafting the proposal
- Revising (and re-revising) the proposal
- Obtaining feedback on one or more drafts
- Double-checking that all instructions have been followed
- Submitting the proposal as instructed

Awaiting the Decision

- Typically, committees evaluate proposals.
- These committees generally contain experts in the field of work (peer reviewers). Sometimes they include others too.
- Often, these committees both
 - Determine which proposals are acceptable
 - Determine which proposals are best (if not enough money is available to fund all acceptable proposals)

Following Up

- If your proposal is funded, doing the work and reporting on it (for example, writing progress reports and journal articles)
- If you are invited to revise and resubmit the proposal, proceeding accordingly
- Otherwise, deciding how to proceed (Note: Even if your proposal is not funded, you may receive feedback that can help in preparing future proposals.)

Key Advice on Preparing Proposals

- Seek a funding source well matched with your goals
- Start preparing your proposal early
- Gather plenty of information
- Follow the instructions carefully
- Prepare a detailed, realistic budget
- Write readably
- Revise, revise, revise

Identifying Suitable Funding Sources

Potential Sites of Funding: Some Sources of Ideas

- Colleagues, mentors, and administrators
- Grant offices at some institutions
- Acknowledgments etc in journal articles
- Published or posted announcements (calls for proposals)
- Email lists in your field or at your institution
- Published or posted guides
- Internet searching

Looking for a Good Match

Seek funding from entities

- With goals that are consistent with what you want to do
- That tend to give grants of the size you are seeking
- If possible, with programs that match your intended work

* * * Note * * *

Consulting a program officer at the potential funding source can be very helpful.

Preparing to Write a Proposal

Starting Early

- Even a short proposal can take a long time. Therefore start early.
- For large grant proposals, it can be advisable to begin at least 6 months before the deadline.

Analyzing Instructions, Examples, etc

- Carefully review materials from the potential funding source.
- Consult the program officer, if appropriate.
- If possible, look at examples of successful proposals to the funding source.
 - From colleagues
 - From the program officer
 - Published or posted

Doing the Groundwork

- Review the literature on work related to yours. Be prepared to cite it.
- Start developing a persuasive explanation of why the proposed project is valuable.
- If your proposal will be for research, formulate one or more well-defined, potentially productive hypotheses or research questions. Beware of proposing a project that is unrealistically large.

Assembling Collaborators

- If you want others to join the project team, invite them. Ask them for needed items, such as information and CVs.
- If you want outside participants, such as consultants, invite them. If appropriate, obtain CVs and letters of support.
- Consider including a writer or editor on the grant-preparation team.

Establishing Timelines

- Especially if you're preparing a large proposal, draft a schedule for doing so. Include time for institutional approvals, if needed.
- Consider preparing a timeline (such as a Gantt chart) for the proposed project. Indicate dates on which you plan to start and finish each main part of the project.

Gathering Budgetary Information

- Start identifying items that you'll ask the funding source to pay for.
- Start determining the cost of each.
- If your institution will contribute resources, identify them, and determine how much they are worth.

Doing Other Items

- If advisable, do preliminary studies.
- If appropriate, consider sustainability.
- If required, submit a letter of intent or a letter of inquiry ("pre-proposal").
- Other?

The Abstract: A Key Component of a Proposal

Proposal Abstract

- Appears at the beginning of the proposal
- Summarizes the proposal
- Usually has a word limit
- May need to meet other requirements

Importance of the Abstract

- Provides a first impression
- Sometimes used in choosing peer reviewers
- Help administrators and reviewers grasp the essence and importance of the work
- Also reminds reviewers about what they have read in the proposal

When to Write the Abstract

- Can be useful to draft the abstract early in the proposal-writing process (helps focus ideas)
- Abstract should be finalized after the rest of the proposal is in final form, for consistency with the body of the proposal

Content and Structure of the Abstract

- Purpose of item being proposed (and, if not obvious, rationale for the item)
- Description of item being proposed—for example:
 - Research plan
 - Project plan
- Expected outcome

Writing Style for Proposal Abstracts

- Concise (to meet word limits and for readability)
- Readable (to be understood quickly)
- Therefore
 - Organize the abstract carefully.
 - Say things simply and directly.
 - Include transitions etc to make clear the structure of the abstract and the relationships of ideas.
 - Avoid wordy language and overly long sentences.
 - Realize that you probably must do several drafts.

Give abstracts the time they deserve!

Example of an Abstract

- From a proposal in the early years of AIDS
- What are some strengths of the writing in this abstract?

Writing the Proposal: Components and Advice

Grant Proposals as Persuasive Writing

Proposals must persuade potential funders that

- the goal of the proposed work is worthwhile
- the goal is relevant to the funder's mission
- the proposed approach is sound
- the staff is capable of doing the work
- adequate facilities will be available
- the requested amount of funding is reasonable
- other?

Some Items That Help Make a Proposal Persuasive

- Inclusion of reasons for choices (for example, regarding techniques, sample sizes, durations, consultants, venues)
- Inclusion of supporting evidence (for example, published findings, preliminary data, calculations, CVs, letters of agreement)
- Competent writing (helps show capability)

Some Common Sections of Proposals

- Background information
- Statement of goals or aims
- Research plan or program plan
- Budget
- Information on qualifications of staff (for example, resumes, CVs, or biosketches)

(Note: Depending on the requirements, proposals can range from one page to many pages.)

Some Other Items Sometimes Included

- Letter of transmittal (cover letter)
- Title page
- Abstract
- Table of contents
- Lists of tables and figures
- Description of predicted impact
- Plan for disseminating results
- · Information on facilities
- Reference list

Appendixes

- · Optional to include
- Examples
 - Papers accepted but not yet published
 - Letters of support from potential collaborators
 - Additional details about activities planned
- Remember: Reviewers typically are not obligated to look at appendixes.

Title

- Short but important
- Should clearly and concisely indicate the focus of the proposal
- May require several drafts

Advice on Writing the Proposal

Writing the Proposal

- Start early—sometimes at least 6 months in advance.
- Consider including a writer or editor on the team.
- Read the instructions carefully, and follow them exactly.
- Match the technical level of the proposal to the background of the reviewers.

Writing the Proposal (cont)

- Remember to include the 5 Ws and an H: who, what, where, when, why, and how.
- Include reasons for your choices.
- Write the proposal readably. For example
 - Organize the writing carefully.
 - Present overviews before details.
 - Use simple, common wording where possible.
 - Avoid wordy phrases.
 - Make effective (but not excessive) use of such devices as headings, boldface, and italics.

Writing the Proposal (cont)

- Include a carefully prepared budget.
- If relevant, include a timeline.
- If relevant, include tables and figures.
- As previously noted:
 - Devote special care to the abstract.
 - Also write a clear, concise title.
- If the potential funder has forms to use, complete them carefully.

Writing the Proposal (cont)

- If part or all of the proposal will consist of freestanding text, format it readably
 - Standard typeface
 - Large enough type and margins
 - Unjustified (ragged) right margin unless otherwise stated
- Have others review drafts of your proposal.
- Double-check that instructions were followed.
- Proofread the proposal carefully.
- Carefully follow instructions for submitting the proposal (often done electronically).

Discussion: Annotated Grant Proposal

- What strengths of this proposal did you notice?
- What, if anything, did you notice that you could apply to writing research proposals?

Avoiding Common Problems

Note

This list is based in part on studies of reasons that proposals were rejected.

Common Problems to Avoid

- Failure to follow the instructions
- Seeming unfamiliarity with relevant previous work
- · Lack of a valid rationale
- Lack of originality
- Superficial or unfocused plan; lack of detail
- Unrealistically ambitious plans

Common Problems (cont)

- Incomplete budget
- Unrealistic budgeting
- Failure to justify budgetary items enough
- Problems with the experimental or other approach
- · Lack of experience with key methods
- · Lack of preliminary data, if needed
- For service projects, lack of sufficient information on evaluation plans

Common Problems (cont)

- Inconsistencies in the content
- Excessive use of acronyms/abbreviations

A Suggestion

Imagine that you receive the grant and do the work as described. Will you then have all the needed information to write the appropriate report(s) or paper(s)? If not, revise the plan in your proposal, to make sure that you would gather all the information you would need.

Some Resources

- Grant Proposals (or Give me the money!): http://writingcenter.unc.edu/handouts/grant-proposals-or-give-me-the-money/
- Tips for Writing a Successful Grant Proposal: http://www.sloan.org/apply-for-grants/tips-for-writing-a-successful-grant-proposal/
- Write Your [Grant] Application: http://grants.nih.gov/grants/how-to-apply-application-guide/format-and-write/write-your-application.htm
- How to Write a Research Project Grant Application: http://www.ninds.nih.gov/funding/write_grant_doc.htm
- AuthorAID: http://www.authoraid.info

Preparing Progress Reports

Progress Reports: Some Functions

- For the funding source or supervisor: help see how the work is progressing and thus whether the plans or funding level should be adjusted
- For those doing the work:
 - Provide incentive to keep up
 - Aid in assessing one's own progress and adjusting one's approach
 - Provide material to use in presentations and publications

Preparing to Write a Progress Report

- Obtain any instructions or forms.
- If feasible, obtain relevant examples to use as models.
- Review your proposal or project plan.

Progress Reports: A Common Structure

- Background information
 - Summary of project plan
- Description of present status
 - Achievements thus far
 - Comparison of progress with that expected
 - Significant problems encountered, if any
- Conclusions
 - Overall assessment
 - Proposed modifications, if any

Writing a Progress Report

- In general, structure the progress report like the project plan.
- Be specific. Include numbers, names, and dates.
- If appropriate, include tables and figures.
- Consider using headings etc to guide readers.

Writing a Progress Report (cont)

- Strive to sound positive, competent, and confident.
- Do not hide problems. Say how they are being addressed.
- If you write a series of progress reports on a project, put each in the same format.
- Edit the progress report carefully.