Interactive Session

Grant Writing for Graduate Research and Beyond

Pamela Dillon, PharmD Research Liaison Center for Clinical and Translational Research

www.cctr.vcu.edu

Jessica Venable

Grant and Research Analyst
Office of the Vice President for
Research

www.research.vcu.edu

Topics to cover

- Qualities of an effective grant proposal.
- Staying on time and on task.
- What you should expect from funders, and what will be expected from you.
- Your turn to review...
- Searching for funding? Some strategies.
- Now what?

"My epiphany came when I realized that grant programs do not exist to make me successful, but rather my job is to make those programs successful."

Qualities of an effective proposal

- Addresses a compelling, specific problem.
- Proposes an innovative approach to address the problem.
- Speaks to the funding requirements.
- Communicates the plan clearly and concisely.
- Costs are reasonable.
- Organization and personnel / recipient are credible.
- Is appealing to the funding agency.

But I'm sick of writing...!

A Dissertation Prospectus is	A Proposal for Funding a Dissertation or Graduate Study is
A highly independent project.	A highly competitive project.
Judged by a group of faculty members who are experts in the field.	Judged by an anonymous committee who may be generalists or specialists.
An exhaustively detailed proposal that can be explained in many pages.	A thoughtfully crafted argument limited to a few pages.
Successful if it convinces the faculty that it meets department requirements.	Successful if it convinces the reviewers that it should be funded over someone else's.*

Dissertation Funding Timeline

Fall/Spring

- Research funding opportunities
- Discuss options with mentors, advisors
- Join professional organizations, present at conferences, publish

Summer

- Update / create CV
- Draft components of application
- Research awards lists, identify trends, find collaborators
- Contact funding agencies with questions

Fall

- Submit drafts to mentors, advisors for feedback
- Request letters of recommendation
- Learn submission procedures

October – February

- Most applications due, verify guidelines
- Verify recommendation letters received

February

- Obtain IRB/IACUC approval
- Keep researching, publishing, presenting

Spring

Decisions made

Know What You're Getting Into, Part 1:

THE FUNDER'S GUIDELINES

Purpose of Funders' Guidelines

What are they?

- May be called guidelines, solicitations, calls for proposals, requests for proposals (RFP), requests for applications (RFA), etc...
- Meant to communicate the information needed to develop a fully responsive proposal.
- Help assure that proposals meet the goals and objectives of the funding agency.

What are they not?

- A menu or a buffet of choices.
- A negotiable listing of performance expectations.
- Always well-written.

Common Elements of the RFP (General)

- Funder's goals and objectives
- Expectations of applicants (performance goals)
- Topics that will be funded
- Scope of work that will be funded
- Expected outcomes
- Review criteria

Common Elements of the RFP (Specific)

Substantive Requirements

- Purpose, Needs statement
- Goals, Objectives, RQs
- Research / Project Plan / Methods
- Evaluation
- Protection of subjects
- Timeline
- Dissemination
- Personal statement, education and career plan
- Expertise
- Budget, Justification

Technical Requirements

- Eligibility (e.g. PhD candidacy)
- Due dates
- Award limits, # of Awards
- Performance period
- Required information
- Formatting requirements
- Contact information
- Forms, certifications

From Mike Cronan, Office of Proposal Development, Texas A&M University "TAMU Grant writing Workshop, Generic Strategies for Competitive Proposals"

Know What You're Getting Into, Part 2:

THE PROPOSAL



Common Elements of the Proposal

- Title
- Abstract or Summary
- Introduction
- Background / Literature Review
- Research Questions*
- Research Plan
- Timeline
- References*
- Personal Statement, Previous Research Experience*
- Budget, Budget Justification
- Support materials (letters, CV, resources)*

Competitive Titles

- The title should be clear, accurate and succinct.
- Sometimes the title determines who reviews the proposal.
- It may be necessary to include the funding program name in your title – double check the guidelines.

Competitive Abstracts

- The abstract should make your proposed project clear to anyone who is reading it.
 - Use the Grandmother Test.
- The abstract should:
 - Capture the reader's attention.
 - Present a compelling idea.
 - Present the proposed project in a logical manner.
- Remember that the abstracts of funded projects are often published.
- Write the abstract last.

Competitive Introductions

- Quickly establish the project's connection to the funder's interests.
 - Why does your project matter? What makes it exciting?
 - Use current, reputable data. Connect to larger issues.
- Possible paradigms for defining how a study will contribute to the field:
 - The project is a research topic that has never been done before.
 - The project is a reassessment of a previously studied approach.
 - The project will expose some new material, which will call for a reassessment of what has already been done.

Competitive Backgrounds / Lit Reviews

- Establish your disciplinary mastery.
- Establish the context of your approach.
 - Highlight points of intersection if it's cross-disciplinary.
 - Demonstrate how your work will resolve contradictions in the debate.
- Some funders expect preliminary results. Know this in advance.
- Avoid hyperbole and hubris.
- Be elegant, not expansive.

Competitive Research Plans

- Pre-empt all of the reviewers' questions.
- May include several subsections:
 - Problem statement
 - Hypotheses; Goals, objectives; Research questions, specific aims
 - Approach, methods, procedures
 - Anticipated outcomes
 - Deliverables
 - Evaluation
 - Protection of subjects
 - Dissemination plan...

Competitive Research Plans

Make Sense

- Clearly articulated.
- Shows methodological congruence.
- RQs are researchable.
- Categories of information (e.g. Objectives, Outcomes) are not scattered all over narrative.
- Aligns with personal statement.
- Is supported by referees.

Are Feasible

- Does not have too many hypotheses, RQs.
- Variables are limited.
- Can be researched given time and resources.
- Limitations are stated.

Competitive Budgets

- Does the funding agency provide its own budget forms?
- Determine what costs are allowable (e.g. conference travel, tuition, internet or cell phone).
- Research per diem rates for field work.
- Choose the most economical, but safe, options for local transport.
- For equipment, list the product name, model, and quantity.
- Present the budget in an easy-to-read format.
- Budgets are often accompanied by a separate document called a "budget justification".
- Be specific and detailed.
- Check your math!

Competitive Style

- Start with clear thinking.
 - Use outlines, diagrams, sketches, etc. to affirm logic.
- Be explicit.
- Write simply. Use strong, declarative verbs.
- Avoid jargon and define acronyms.
- Remember coherence: the entire application will be considered.
- Make the proposal skimmable.
 - Employ section headers, bold, bullets, Gantt charts, graphics.
 - Use white space.
- Be confident and passionate, but not arrogant.

Other Considerations

- Do not underestimate or overestimate:
 - Timeline.
 - Budget.
 - Expertise.
 - Resources.
 - Access.
 - Alternatives.
- Know what you will have to do for IRB approval.
 - May impact design
- Know who you need to complete your team.
- Do not collaborate for the sake of collaboration.
- Pick your referees carefully and treat them professionally.

But it's not a "dissertation" grant...

You can still get funding to support your research.

- There may be less emphasis on your education and career trajectory.
 - Focus on the project, create clear bounds.
- You will still have to address your expertise and capacity.
- You will still have to address feasibility.
- Consider the project budget.

Know What You're Getting Into, Part 3:

THE REVIEWERS

Grant Review Panel, 1950s



Grant Review Panel, 1950s











Know the Reviewers

- Assume that the reviewers are tired and are not experts in your sub-discipline.
- BUT, be prepared for at least one expert on the panel.
- Speak the language the reviewers understand.
- Know what the funding agency expects from reviewers.
 - If possible, obtain a copy of the rating rubric.
 - Talk to people who have served as reviewers.
- Their comments are meant to be constructive.

Some Reviewer Comments

Competitive

- Research questions were conceptually cutting-edge.
- Broadly pitched the conceptually-motivated introduction in the first page.
- Methods strongly related to hypotheses.
- Strongly argued that project would answer the questions posed.
- Exhibited some degree of independence from advisor.

Non-Competitive

- Sound, but not terribly exciting.
- Questions and inquiry are not conceptually rigorous.
- Poor scholarship.
- Poor integration of proposal sections.
- Lacks sufficient detail to determine...
- The proposal has been "boiler-plated".
- Sloppy presentation.
- Overly ambitious.

YOUR TURN TO REVIEW

Sample Proposals

- What did you like / not like about the proposal?
- What were the proposal's strengths and weaknesses vis-à-vis the sponsor's guidelines?
- What elements would you adapt to your own needs?
- What would you change?
- Would you fund it?
- Do you think the sponsor funded it?
- What comments do you think the reviewers made?

WORKING ON YOUR OWN

Searching for Funding

- Graduate students tend to think too narrow. Search in the areas that sponsors want to fund.
 - Sponsors want to invest in the future workforce (you).
 - Sponsors want to improve the health and welfare of society.
 - Sponsors want to make practical, measurable improvements.
- Review the literature.
- Find a funding opportunity that you know and work backwards.
- Explore alternative disciplines.
- Think about the characteristics of you.
- Start with http://pivot.cos.com/curated_opps/196

Final Thoughts

- Know your funding agency.
 - Hypothesis driven?
 - Require or reject science-style proposals?
- Read the guidelines. Then read them again. Then reread them. Then read them with a hi-lighter. Then have someone else read them. Then read the agency website. Then read the guidelines again.
- Tell a good story. Tell a story that the grantor wants to hear. Connect to big issues and trends.
- Put your project at the center of the proposal.
- Write and re-write. Get input. Don't be insulted. Write again.

Resources

- University of California, Berkeley Institute for International Studies: Dissertation Proposal Resources http://iis.berkeley.edu/content/dissertation-proposal-resources
- Verba, C. Scholarly Pursuits: A Guide to Professional
 Development in the Graduate Years. Twelfth Ed. A publication
 of the Graduate School of Arts and Sciences, Harvard
 University.
 http://gsas.barvard.edu/images/stories/ndfs/scholarly_pursuit
 - http://gsas.harvard.edu/images/stories/pdfs/scholarly_pursuits.pdf
 - > See Chapter V.
- Pzreworski, A. & Salomon, F (1995 rev., 1988). The Art of Writing Proposals. Social Science Research Council.
 http://www.ssrc.org/publications/view/7A9CB4F4-815F-DE11-BD80-001CC477EC70/

Resources at VCU

- VCU National Scholarship Office <u>http://www.honors.vcu.edu/nationalscholar/</u>
- VCU Writing Center <u>http://www.vcu.edu/uc/writingcenter/</u>
- VCU Libraries
 http://guides.library.vcu.edu/graduate-grants
 http://guides.library.vcu.edu/health-sciences-grants
- Grant writing courses (Psychology, Anatomy, Gerontology, Allied Health...)