

BPC-Centric Proposal Writing

Jan Cuny
National Science Foundation
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Outline

- The Review Process & Implications
- Content
- FastLane
- Tips

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NSF Programs are very competitive:

- 6 of 41 BPC Alliances
- 10 of 91 BPC Demonstration Projects

Having a great idea is not good enough.

You have to sell the idea, and your ability to pull it off.

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Proposal Processing

- Submission (FastLane, Grants.gov)
- Assignment to program
- Merit review
- Analysis of reviews & Action

Takes 6 months!
2009 BPC grants start Nov/Dec 2009

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Possible Outcomes

- Award (negotiation)
- Declination
- Withdrawal
- Returned as inappropriate or not meeting NSF guidelines

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The Panel Review Process

- A panel for 30 proposals might have 12 -15 people.
- BPC Panels will include members of all targeted groups, CISE researchers, experts on K-12, experts on CCs, and evaluators.
- Not everyone will read every proposal; 8 -10 per person.
- The panel is charged with assessing the proposals according to the solicitation.
- The panel's recommendations are advisory.

Implications of Review Process

- ➔ Organize your proposal well; make it easy to find key sections.
- ➔ Make the content of your proposal accessible to the expert and nonexpert alike.

Mistake #1

"I won't bother to organize my proposal. They'll get the main idea."

Mistake #2

"My programs/ideas are so great I'm certain NSF won't care whether they fit the program guideline."

Implications of Review Process (cont.)

- ➔ Make sure that your proposal is responsive to the solicitation.

Responsiveness

- Read the entire solicitation carefully, checking for additional criteria (BPC has some).
- Address each area in the solicitation.
- Talk to the program officer.

Mistake #3

"I'm sure they don't actually count the pages. No one will notice I'm over the page limit. Maybe I should just use a smaller font."

Implications of Review Process (cont.)

➔ Follow the GPG guidelines on page limits, font, & URLs
Make it compliant!

- BPC-A, BPC-AE, BPC-DP, BPC-LSA
- Criteria I & II in Program Summary
- References Cited
- Postdoc mentoring plan
- Font, Page limits

GPG: Grant Proposal Guide

Search on “GPG” or

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg

How to make a Reviewer Unhappy

Don't spell check.
Change formatting halfway through the paper.
Use really small text.
To save space, just add URLs to pertinent information.
Bounce around from subject to subject.
Claim you're going to do x then actually describe y.
List all of your achievements and describe all of your current research and spend one page describing new work.
Make it really difficult to dig out the broader impact, intellectual merit, and proposed work.
Ask for tons of money for lots of students to do very little work.
Assume your reviewer knows your field intimately, and jump straight to the details.
Cut and paste three existing proposals from different people into one proposal, and add a summary page that “glues” the result together.

--- Cindy Grimm <http://www.es.wustl.edu/~cmg/nsf.html>

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Mistake #4


“Trust us; we know what we're doing.”

In General ...

- Original and/or good ideas (Novelty counts!)
- Well-formulated idea(s); clear statement of what you want to do
- Sufficient detail provided
- Realistic amount of work
- Succinct, focused project plan
- List of specific tasks and timelines


 **FastLane**

Form	Saved	Form	Saved
<input type="checkbox"/> Cover Sheet	04/09/05	<input type="checkbox"/> Project Summary	
<input type="checkbox"/> Table of Contents	N/A	<input type="checkbox"/> Project Description	
<input type="checkbox"/> References Cited		<input type="checkbox"/> Biographical Sketches ←	
<input type="checkbox"/> Budgets (Including Justification) ←		<input type="checkbox"/> Current and Pending Support ←	
<input type="checkbox"/> Facilities, Equipment, and Other Resources ←		<input type="checkbox"/> Supplementary Docs ←	
Single Copy Documents			
<input type="checkbox"/> PI/Co-PI Information	N/A	<input type="checkbox"/> Add/Delete Non Co-PI Senior Personnel	N/A
<input type="checkbox"/> Deviation Authorization(if applicable)		<input type="checkbox"/> Change PI	
<input type="checkbox"/> List of Suggested Reviewers (optional)		<input type="checkbox"/> Link Collaborative Proposals	
<input type="checkbox"/> Additional Single Copy Documents			

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A Proposal Contains

- Cover Sheet and other special forms
- Suggested List of Reviewers to (not) use
- Project Summary - *1 page*
- Table of Contents - *automatically generated*
- Project Description (including prior NSF support) - *max 15 pages (extra 5 for Alliance Prior Results)*
- References Cited - *Required!*
- Biographical Sketches - *2 pages/senior person*
- Budget sheets and justifications
- Current and Pending Support - *all sources*
- Facilities, Equipment and other Resources - *only those relevant*

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Proposal Summary


- Suitable for publication: not an abstract ... a self-contained description of the activity.
- Include a statement of objectives and methods to be employed.
- Written in third person.
- Not more than one page in length.
- **MUST** clearly address in separate statements:
 - Intellectual merit
 - Broader impacts

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Mistake #6


"NSF's not serious about those Intellectual Merit and Broader Impact statements in the summary. They're so obvious anyway."

Put them in with clear headings!!

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Evaluation Criteria I: Intellectual Merit

- Does it advance knowledge and understanding?
- How well qualified is the proposer?
- Does it suggest and explore creative and original concepts?
- Is it well-conceived and organized?
- Is there sufficient access to resources?

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Evaluation Criteria II: Broader Impact

- Does it advance discovery and understanding while promoting teaching, training, and learning?
- Does it broaden the participation of underrepresented groups?
- Does it enhance the infrastructure for research and education, such as ... partnerships?
- What are the benefits to society?

Generic Project Description

- Problem Statement
- Significance
- Related Work
- Feasibility
- Strategy for Accomplishing Project (Evidence of effectiveness)
- Assessment Plan
- Dissemination Method
- Future Intentions (Sustainability)
- Qualifications of the PIs
- Prior results

Mistake #6

"NSF should know what I've done in the past without my having to tell them. After all, they paid for it."

BPC Instructions for Project Description

Must include 4 sections:

1. Project Goals and Outcomes
2. Implementation Plan
3. Partnership Plan
4. Evaluation Plan

1. Project Goals and Outcomes

- Describe the goals and anticipated outcomes of the proposed project.
- ... clearly informed by the [PI's] demonstrated knowledge of factors affecting the successful recruitment and retention of students from the targeted underrepresented communities

2. Implementation Plan

- Describe in detail activities to be undertaken.
- Highlight potential for successfully aligning with similar programs and efforts.
- Describe creative, strategic actions that promise significant improvements in underrepresentation.
- Describe existing research base & new research that will further contribute to the knowledge base.
- Describe dissemination of results, both positive and negative.

3. Partnership Plan

- Provide evidence that ... participating organizations will work together.
- Provide evidence of institutional and organizational commitment.

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4. Evaluation Plan

- Describe the evaluation plan that guides project progress and measures its impact.
- Describe instruments/metrics used to measure, document, and report on the project's progress.

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Mistake #5

"Evaluation will be ongoing and consist of a variety of methods."

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Home News Elements nat.gov

FastLane

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Mistake #6

"I won't need to know anything about FastLane until moments before the deadline."

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FastLane

Time sinks:

- You need a PIN
- Your organization must be set up submit to grants
- Subcontracts take time!
- Human subject clearance takes lots of time

Talk to your SRO!

Advice on Budgets

- Request realistic items and amounts.
- Justify anything at all unusual.
- Include necessary items only.
- Remain within guidelines.
- Indicate institutional cost sharing if you have it (not required).

Excessive budgets really irritate reviewers!

Expect budget negotiations with NSF

Mistake #7

"I'll inflate my budget because NSF always ends up cutting it anyways."

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General Tips

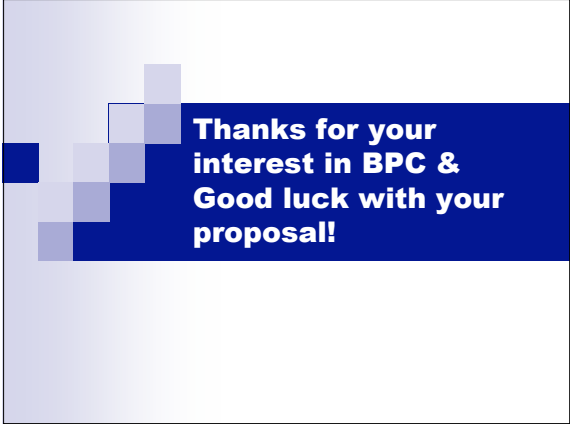
- Talk to your program officers.
- Participate on a panel.
- Get copies of previous proposals from your colleagues.
- Do your own peer review.
- *EVERYBODY* has NSF declines: Be persistent.

BPC Panels wanted to see ...

- Novel
- Pathway from K-12 activities to college enrollment
- Long term engagement
- Effect beyond improvements in local environment
- Great literature review
- Details on the evaluation plan (Evaluation results)
- Activities / Approach specific to targeted groups
- Evidence of real collaborations

Credits

Thanks to
Caroline Wardle
Harriet Taylor



**Thanks for your
interest in BPC &
Good luck with your
proposal!**