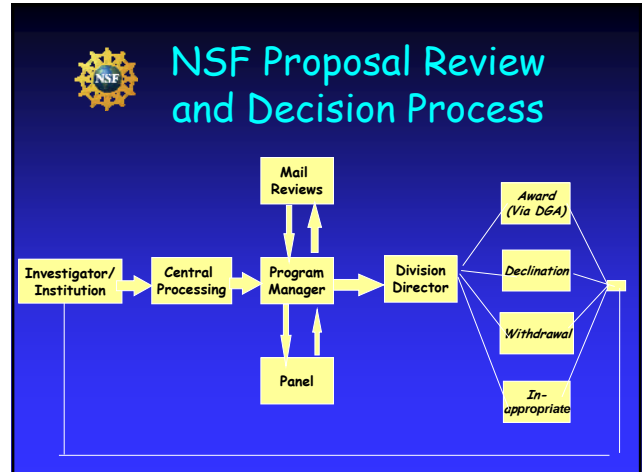





## Strategies for Writing Competitive NSF Proposals

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## Compliance Check

- Hurdle #1:
  - ◆ Do you specifically address intellectual merit and broader impacts in the project summary
  - ◆ Number of pages, formatting, font size
  - ◆ Completeness

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## Merit Review

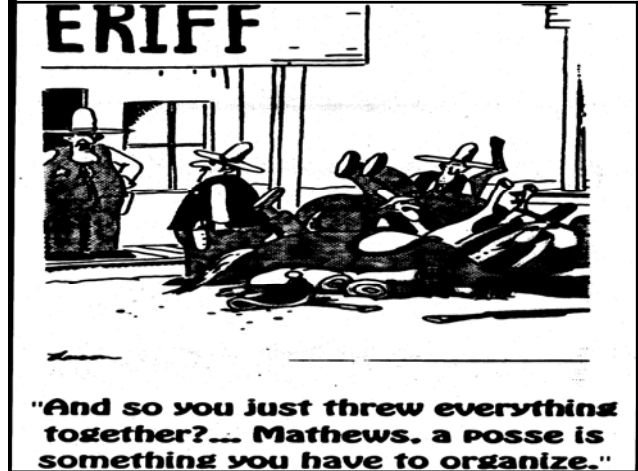
- Hurdle #2 (Mail and Panel Reviews)
  - ◆ Convince a panel of your peers that there is a need and it's a good idea, you and your team are the appropriate people to do it, you have the necessary infrastructure, and your goals and objectives are tied to evaluative activities

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## Panel Review Process

- Read and enter reviews on FastLane.
- Look at Intellectual Merit and Broader Impacts of the proposal, but look at everything.
- Rate proposal (E, V, G, F, P)
- Panel meets and discusses proposals; reviewers can change their ratings.
- Competitive proposals usually have E's and V's, proposals with average less than 3.5 are usually considered non-competitive.
- E = 5, V = 4, G = 3, F = 2, P = 1



## Criteria for Evaluation

- ◆ What is the intellectual merit of the proposed activity?
- ◆ What are the broader impacts of the proposed activity?



## Intellectual Merit

- Addresses a major challenge
- Informed by other projects (references)
- Rationale and vision clearly articulated
- Supported by capable faculty and others
- Adequate facilities, resources, and commitment
- Improved student learning
- Effective evaluation and dissemination
- Institutional and departmental commitment (sustainability)



## Broader Impacts

- Integrated into institution's academic programs
- Contributes to knowledge base, useful to other institutions
- Widely used products that can be disseminated through commercial and other channels
- Improved content and pedagogy for faculty and teachers
- Increased participation by women, underrepresented minorities, and persons with disabilities
- Ensures high quality STEM education for people pursuing careers in STEM fields or as teachers or technicians



## General tips

- At the DUE Web Site
  - ◆ <http://www.nsf.gov/div/index.jsp?div=DUE>
  - ◆ Create a personalized alert service
- Get copies of previously funded proposals
  - ◆ Directly from the PI
- Contact a program officer (PO) and offer to review proposals

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## Tips for Success

- READ the program solicitation and NSF Proposal & the Grant Proposal Guide (GPG)
- Test drive FastLane
- Alert the Sponsored Research Office
- Follow page and font size limits
- Be aware of other projects and advances in the field



## Tips for Success

- Cite the literature
- Provide details
- Discuss prior results - outcomes...
- Include evaluation plan with timelines and benchmarks
- Put yourself in the reviewers' place
- Consider reviewers' comments if resubmitting proposal, but rethink the entire project as well



## Tips for Success

- Have someone else read the proposal
- Spell check; grammar check
- Meet deadlines
- Follow NSF requirements for proposals involving Human Subjects
- Call or email NSF Program Officers



## Return Without Review

- Submitted after deadline
- Fail to separately and explicitly address intellectual merit and broader impacts in the Project Summary
- Fail to follow formatting (e. g. page limitation, font size, and margin limits) requirements



## Making the Project Better Based on Review Criteria

Helpful Hints


(What do you think they are?)



## Helpful Hints:


1. Read the Program Solicitation
2. Build on What Others Have Done
3. Use Teamwork and Partnerships
4. Use Good Management Skills
5. Evaluation Addresses Impact and Effectiveness





### Top Ten Ways To Write a "Good" Proposal... That Won't Get Funded


1. Assume deadlines are not enforced.
2. Assume page limits and font size restrictions are not enforced.
3. Substitute general rhetoric for good examples.
4. Don't check your spelling, nor your grammar.
5. Assume the program guidelines have not changed; or better yet, ignore them!



### Top Ten Ways To Write a "Good" Proposal... That Won't Get Funded


6. Assert: "Evaluation will be ongoing and consist of a variety of methods."
7. Assume a project website is sufficient for dissemination.
8. Assume your past work is well known and ignore "Results of Prior Support".
9. Provide a template letter of commitment for your (genuine) supporters to use. (They will!)
10. Inflate the budget to allow for negotiations.

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### WAYS to PARTICIPATE in the Process

- ◆ Principal Investigator
- ◆ Member of Project Team
- ◆ Member of a coalition
- ◆ Member of an Advisory Board
- ◆ Test Site
- ◆ User of Products
- ◆ Participant in Workshops and Symposium
- ◆ Reviewer of Proposals



### Thank You!

- Questions?
- Comments?



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