

Reviewing Proposals

1. READ THE PROPOSAL SOLICITATION (all similar, but review criteria differ)
 - Request for Proposals (RFP) —National Science Foundation
 - Request for Applications (RFA) — National Institutes of Health
 - Funding Opportunity Announcement (FOA)—Dept of Energy
 - Research Opportunities in Space & Earth Sciences (ROSES) — NASA
2. Allow 2-4 hrs per proposal
 - [one day each if serving on a panel where the reviews must be evaluated]
 - a) Read the entire proposal to get the big picture
 - b) Re-read the proposal making comments/questions
 - c) Put a \$ where a cost is involved (be sure it is budgeted)
 - d) Evaluate the qualifications of PI's. Does the team have expertise needed?
3. Writing the review
 - a) Put yourself in the place of the proposer. How would you like to be treated?
 - Start with a positive statement, even if the proposal is not good.
 - b) Cite examples of where the intent is unclear and WHY!
 - c) Point out methods or logic that is not valid, and suggest alternatives.
 - d) If you must cite your own work, cite other literature as well.
 - e) End with suggestions for revisions that could improve the proposal.

NSF Review Criteria

Note that Panelists
get 15min to discuss
each proposal

A. The Intellectual Merit Criterion:

What is the intellectual merit of the proposed activity?

- 1) How important is the proposed activity to **advancing knowledge and understanding** within its own field or across different fields?
- 2) How well **qualified is the applicant** (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of prior work.)
- 3) To what extent does the proposed activity suggest and explore **creative and original** concepts?
- 4) How well **conceived and organized** is the proposed activity?
- 5) Is there sufficient access to **resources**?

B. The Broader-Impacts Criterion:

What are the broader impacts of the proposed activity? NSF staff will give careful consideration to the following in making funding decisions:

- 1) How well does the activity **advance discovery and understanding** while **promoting teaching, training, and learning**?
- 2) How well does the proposed activity broaden the participation of **underrepresented groups** (e.g., gender, ethnicity, disability, geographic, etc.)?
- 3) To what extent will it **enhance the infrastructure** for research and education, such as facilities, instrumentation, networks, and partnerships?
- 4) Will the results be **disseminated broadly** to enhance scientific and technological understanding?
- 5) What may be the **benefits** of the proposed activity to society?

Examples of Broader Impacts

- Advance discovery while promoting teaching, training and learning
- Broaden participation of underrepresented groups (minorities, women, regions)
- Enhance infrastructure for research and education (computer codes, open facilities)
- Broad dissemination to enhance scientific and technological understanding
- Benefits to Society (What, Where, When, Why and How)

For each of these Broader Impacts give specific examples.
You are not expected to have an impact from each category.
Be realistic. Don't exaggerate.

How do Broader Impacts Affect the Funding Decision?

Intellectual Merit is more heavily weighted, however panels are required to rank The Broader Impacts (BI) on a scale of 1-4. If the proposal is ranked 'competitive', a High BI score could push it into the 'highly competitive' category.

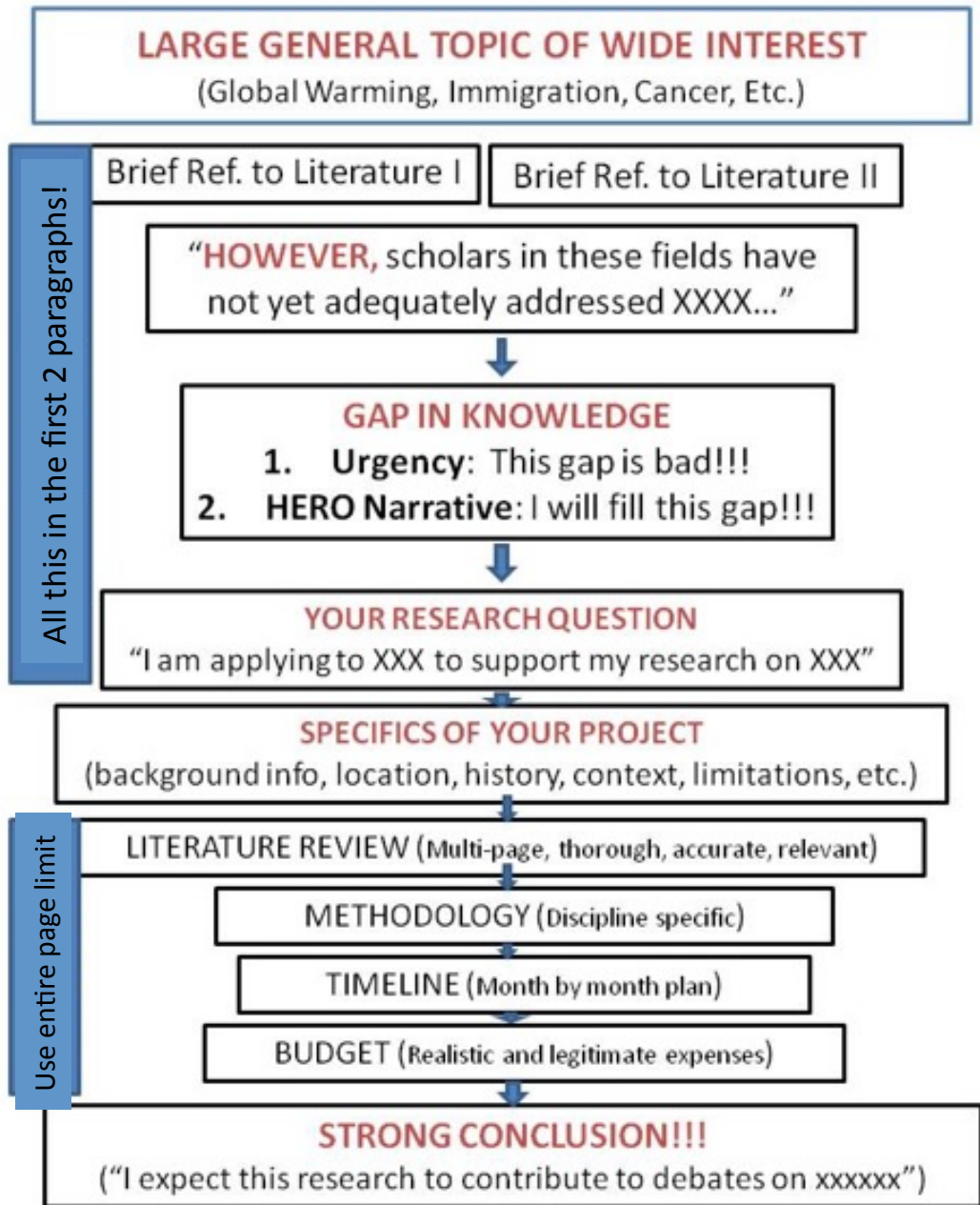
Don't forget that if the Data Management Plan or Mentoring Plan (for Post-docs) is missing, the proposal will be rejected.

Writing a Successful Proposal

<http://theprofessorisin.com/2011/07/05/dr-karens-foolproof-grant-template/>

- Proposal Summary must be succinct!
- Background (1-2 paragraphs)
- Pilot data must be presented to support the hypothesis
- Proposed Research
 - Start with hypothesis statement
 - Clearly define objectives and goals
- Literature review
 - Bring the reader up to date with examples of related research, methods, timeline
 - anticipated results/alternatives
- Conclude with the importance of the research and broader impacts.

“The Foolproof Research Proposal Template”



Proposal Writing

Do's

- Write Program Director for advice on the best program for your proposal
OR
- Visit Program Director
Get pitch training
- FOLLOW THE RULES
Font
Page/Word limits
Required Sections
Overview
Intellectual Merit
Broader Impacts
Mentoring Plan
Data Management
- Respond to Prior Reviewer Comments
- Use figures over words
- Check spelling and grammar
- Thank Program Director after receiving the proposal evaluation.

Dont's

- Use the smallest font
- Squeeze the line spacing
- Use undefined acronyms
- Cite only your work or your advisors
- Cite only the most recent literature
(cite original papers-written prior to www)
- Attack the work of others
- Try to guess reviewers identities
- Over-emphasize the novelty of your work
(‘for the first time’....draws fire)
- Complain about the proposal ranking
- Forget to Summarize Anticipated Results
- Forget to Present Alternative Strategies
- FORGET PAGE NUMBERS!