

# WRITING GRANT PROPOSALS

## CRA 2006 Academic Careers Workshop

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# Type of Proposal

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**Individual  
or  
Group**

**Program or Project**

***Research or Education***

**Target Organization**

# Next, What do You Want?

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**Equipment**

**Things**

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**Travel**

**People**

**Facilities**

**Expenses**

**Services**

# Institutional Environment

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- Research base (faculty, students, etc.)
- Appropriate research and teaching policies
- Adequate infrastructure
- Commitment to proposed projects (\$\$)

# Defining the Project

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- Choose a problem/idea you wish to pursue
- Survey the literature
- Contact established investigators in the area
- Prepare a brief concept paper
- Discuss your idea with others
- Get started on the project

# Your Proposal Should Answer These Questions

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- What are you going to do?
- Why is this important?
- What is your unique contribution?
- Is it feasible?
- Why are you the best person to do it?
- What are others doing in this area?
- How will you do it?
- How will you evaluate your results?

# Important Activities

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- Examine Funding Agency Ground Rules
- Talk with the Targeted Program Officer
- Review Comments from Previous Submissions
- Coordinate with your Institution
- Allow Adequate Development and Processing Time
- Start working with *Fastlane* or *grants.gov* **before** the submission deadline

# A Proposal Contains:

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- Cover Sheet and other special forms
- List of Suggested Reviewers to (not) use - *optional*
- Project Summary - *1 page*
- Table of Contents - *automatically generated by Fastlane*
- Project Description (including results from prior NSF support) - *maximum 15 pages*
- References Cited
- Biographical Sketches - *2 pages/senior person*
- Budget sheets and justifications
- Current and Pending Support - *all sources*
- Facilities, Equipment and other Resources - *only those relevant*

*Appendices are usually not allowed*

*Check the GPG for details:*

*[http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=gpg](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg)*



# Project Description

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- Problem statement
- Significance
- Related work
- Feasibility
- Strategy for accomplishing project
- Assessment/evaluation plan
- Dissemination method
- Future intentions

# Proposal Presentation Hints

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- Present your ideas clearly and succinctly
- Present the main thrust of the project at the beginning
- Use a concise, scientific writing style
- Organize to permit skimming
- Reviewers are technical peers - provide adequate explanation
- **Address intellectual merit and broader impact in project summary - required by NSF**

*Always remember that you are selling this to the REVIEWERS*

# Advice on Budgets

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- Request realistic items and amounts
- Justify anything at all unusual
- Include necessary items only
- Remain within guidelines
- Indicate institutional cost sharing if required

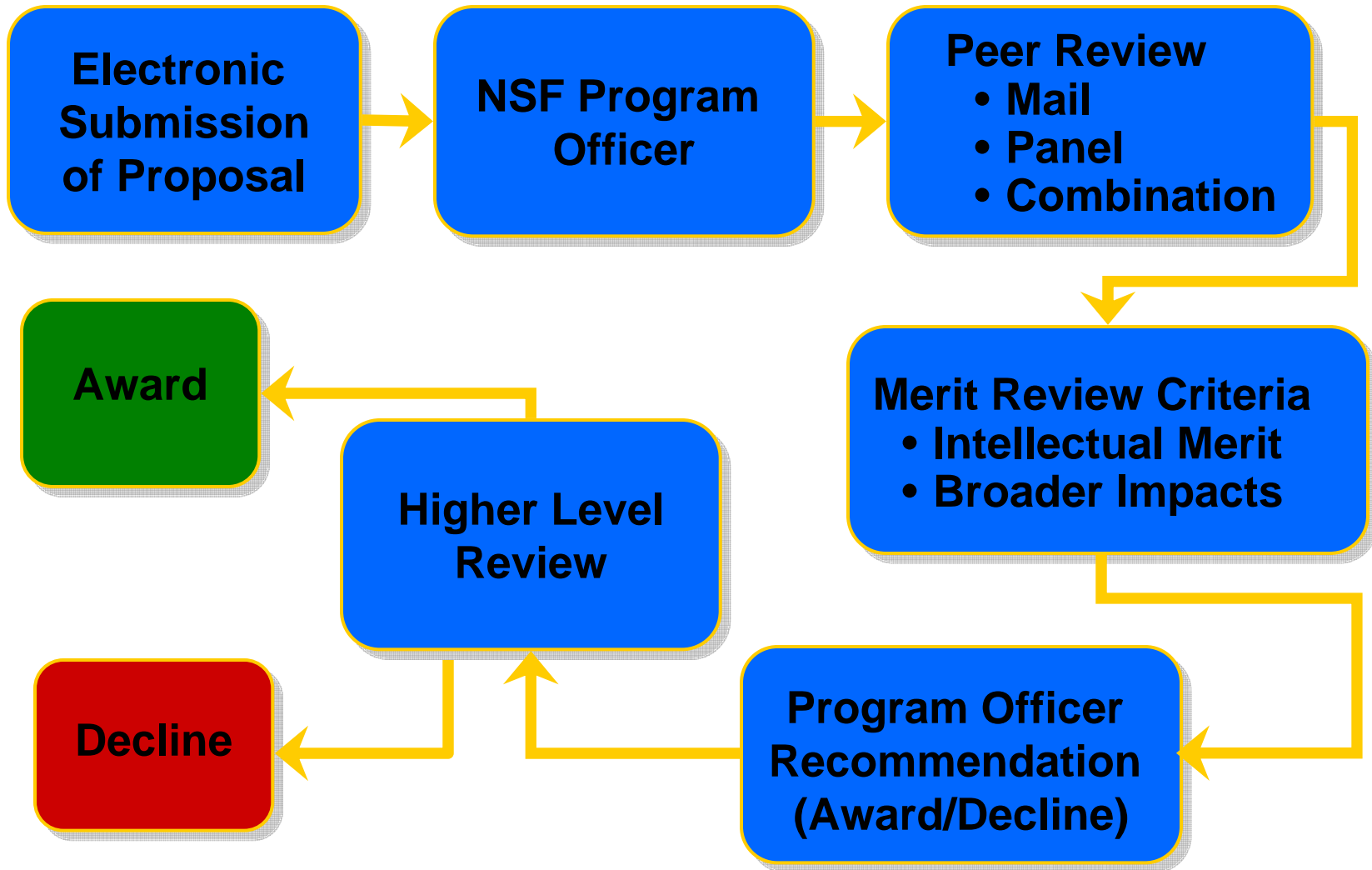
*Get assistance from your sponsored research office*

*Excessive budgets really irritate reviewers!*

*Expect budget negotiations with NSF*

# NSF Proposal Processing

*Six months time from submission to action*



# NSF Proposal Review

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## Type of review

- Panel
- Mail
- Combination

## Possible Conclusions

- Award
- Declination
- Withdrawal\*
- Returned as Inappropriate or not meeting NSF guidelines\*

*\* Proposals are usually withdrawn or returned prior to review*

# Evaluation Criteria

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## 1. What is the **intellectual merit** of the proposed activity?

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

## 2. What are the **broader impacts** of the proposed activity?

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups. To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

# Common Problems of Non-Competitive Proposals

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- Key points are buried, no highlights, no impact
- No innovative topic or approach
- Difficult to read, full of jargon, too long, too technical
- Misspellings, grammatical errors, wrong client name, and inconsistent formats
- Failure to differentiate your work from others.  
e.g., no reference to relevant literature

# What is grants.gov?

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- A single source for finding grant opportunities
- A standardized manner of locating and learning more about funding opportunities
- A single, secure and reliable source for applying for Federal grants online
- A simplified grant application process with reduction of paperwork
- A unified interface for all agencies to announce their grant opportunities, and for all grant applicants to find and apply for those opportunities

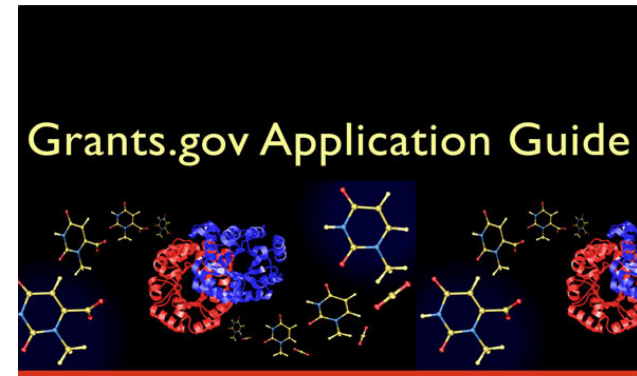


# NSF grants.gov Application Guide



- Intended to serve as the primary document for use in preparation of NSF applications via grants.gov
- Includes step-by-step instructions for completion of each of the SF 424 forms as well as the NSF specific forms
- Provides specific instructions for inclusion and conversion of pdf files

***<http://www.grants.gov>***



A Guide for Preparation and Submission of  
NSF Applications via Grants.gov



# If Your Proposal is Declined

## REMEMBER

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- You are in good company
- Awards are highly competitive
- Budgetary limitations exert influence
- NSF priorities exert influence

*Examine the reviews and  
**TRY AGAIN!***

# Volunteer to be a Reviewer

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## **You will:**

- read good and bad proposals
- see the review process in action
- write better proposals next time
- get a good view of where the field is moving
- meet senior people in your field
- give back to the community

# NSF-Wide Programs for Beginning Faculty

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## ***CAREER and PECASE:***

*<http://www.nsf.gov/home/crssprgm/career/start.htm>*

## ***RUI/ROA:***

*[http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf00144](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf00144)*