NSF Merit Review Process

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Hosted by: The University of Colorado at Boulder

Ask Early, Ask Often!!

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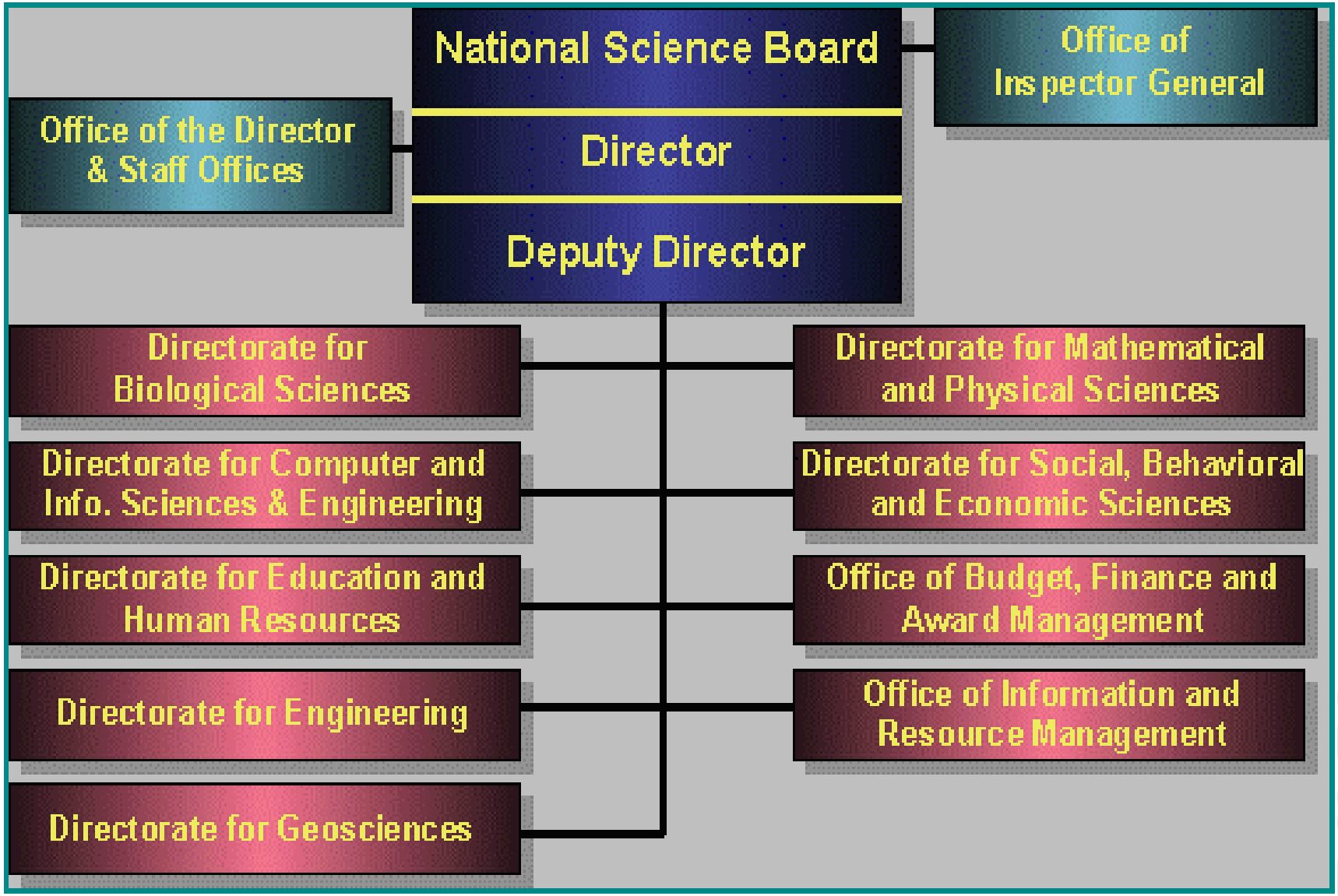
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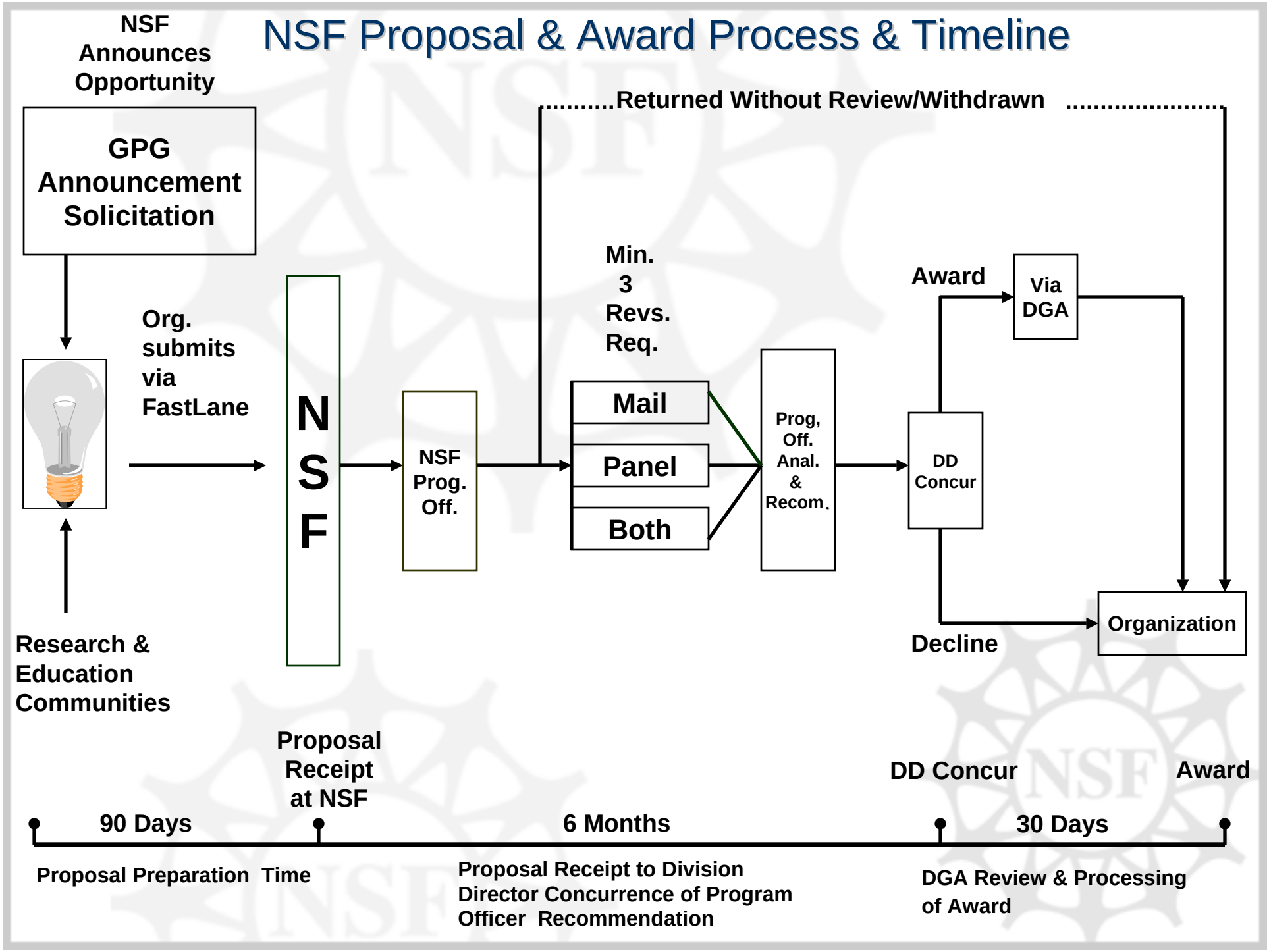
NSF Proposal & Award Process & Timeline



Return Without Review

The Proposal:

- is inappropriate for funding by the National Science Foundation
- is submitted with insufficient lead-time before the activity is scheduled to begin;
- is a full proposal that was submitted by a proposer that has received a "not invited" response to the submission of a preliminary proposal;
- is a duplicate of, or substantially similar to, a proposal already under consideration by NSF from the same submitter;

Return Without Review

The Proposal:

- does not meet NSF proposal preparation requirements, such as page limitations, formatting instructions, and electronic submission, as specified in the Grant Proposal Guide or program solicitation;)
- is not responsive to the GPG or program announcement/solicitation;
- does not meet an announced proposal deadline date (and time, where specified); or
- was previously reviewed and declined and has not been substantially revised.

NSF Merit Review Criteria

- NSB Approved Criteria include:
  - Intellectual Merit
  - Broader Impacts of the Proposed Effort

What is the intellectual merit of the proposed activity?

- **Potential Considerations:**
  - 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? (If appropriate, the reviewer will comment on the quality of prior work.)
  - 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?

What are the broader impacts of the proposed activity?

- **Potential Considerations:**
  - How well does the activity advance discovery and understanding while promoting teaching, training and learning?
  - How well does the activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)?
  - To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks and partnerships?

What are the broader impacts of the proposed activity?

- **Potential Considerations:**
  - Will the results be disseminated broadly to enhance scientific and technological understanding?
  - What may be the benefits of the proposed activity to society?

Return Without Review

- Per Important Notice 127, *"Implementation of new Grant Proposal Guide Requirements related to the Broader Impacts Criterion"* --
  - Proposals that do not separately address both criteria within the one-page Project Summary **<u>will be</u>** returned without review.
- Examples of Broader Impacts
  - http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf

Reviewer Selection

- Identifying reviewers
- PI reviewer suggestions

NSF Sources of Reviewers

- Program Officer's knowledge of what is being done and who's doing what in the research area
- References listed in proposal
- Recent technical programs from professional societies
- Recent authors in Scientific and Engineering journals
- S&E Abstracts by computer search
- Reviewer recommendations
- Investigator's suggestions
- Letter to Program Officer

Investigator Input

- Proposers are invited to either suggest names of persons they believe are especially well qualified to review the proposal or identify persons they would prefer not to review the proposal.

Managing Conflicts of Interest in the Review Process

Reviewer Conflicts Procedures

- Primary purpose is to remove or limit the influence of ties to an applicant institution or investigator that could affect reviewer advice

- Second purpose is to preserve the trust of the scientific community, Congress, and the general public in the integrity, effectiveness, and evenhandedness of NSF's peer review process

Examples of Affiliations with Applicant Institutions

- Current employment at the institution as a professor or similar position
- Other employment with the institution such as consultant
- Being considered for employment or any formal or informal reemployment arrangement at the institution
- Any office, governing board membership or relevant committee membership at the institution

Examples of Relationships with Investigator or Project Director

- Known family or marriage relationship
- Business partner
- Past or present thesis advisor or thesis student
- Collaboration on a project or book, article, or paper within the last 48 months
- Co-edited a journal, compendium, or conference proceedings within the last 24 months

Reviewer / Program Roles and Funding Decisions

- Quality Control
- Budget Constraints
- Balancing Priorities
- Taking Risks

Funding Decisions

- Feedback to PI
- Informal and formal notification
- Scope of work and budget discussions

Reasons For Funding A Competitive Proposal

- Likely high impact
- PI Career Point (tenured?/“established”/ “young”)
- Place in Program Portfolio
- Other Support for PI
- Impact on Institution/State
- Special Programmatic Considerations (CAREER/RUI/EPSCoR)
- Diversity Issues
- Educational Impact
- “Launching” versus “Maintaining”

Summary of the Review Process

- Return without review
- Intellectual merit
- Broader impacts
- Reviewer selection
- Conflicts of interest
- Review panel
- Funding decisions
- Competitive proposals