

Proposal Life Cycle: What Happens to My Proposal?



Juan Jenny Li and CISE CAREER Team
Office of Advanced Cyberinfrastructure
National Science Foundation

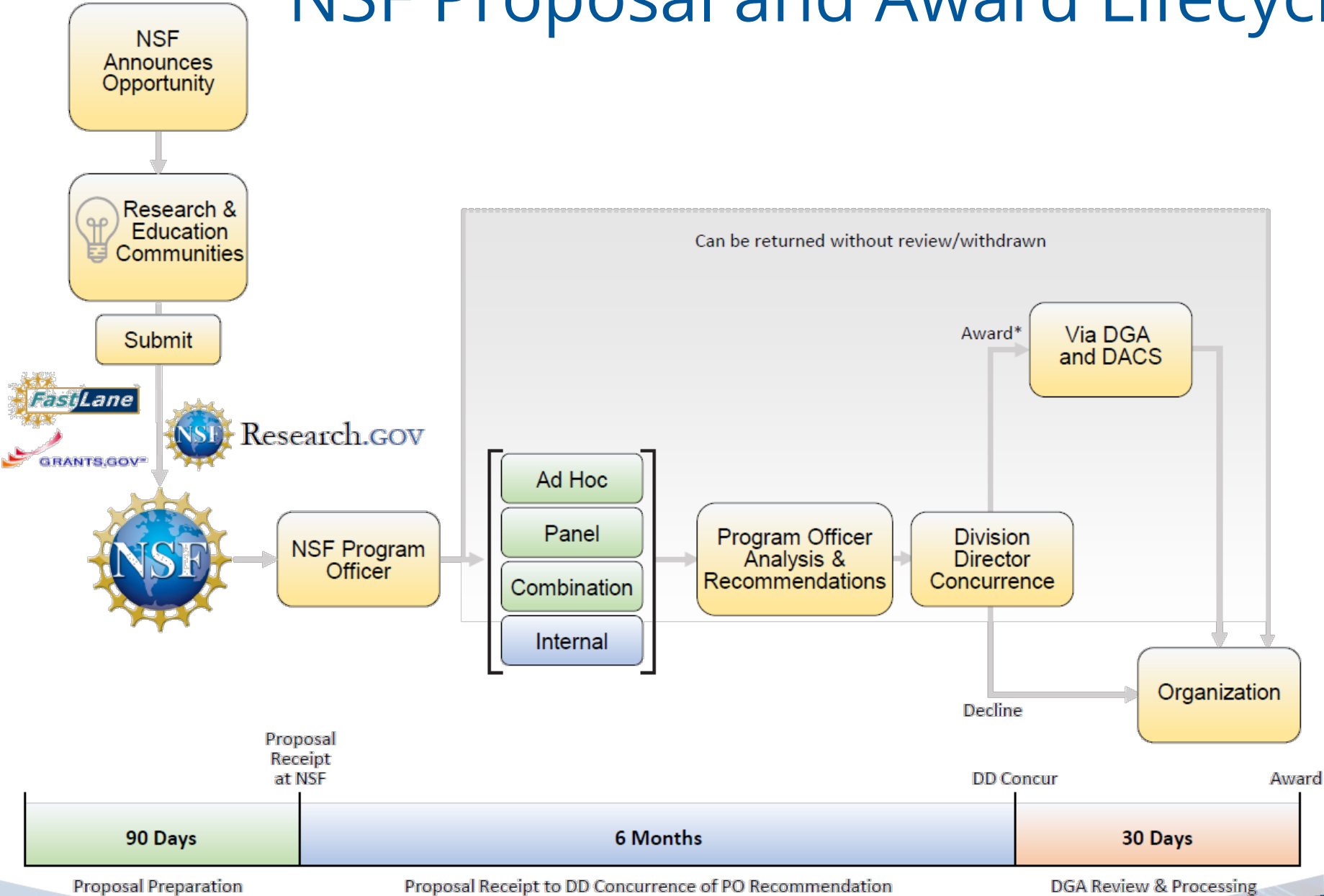
CISE CAREER Webinar
May 2, 2025

Topics

- An overview of a proposal life cycle
 - How are awards made?
- Pre-submission Suggestions?
 - How do I increase my chances of success?
 - Other relevant programs (What about CRII?)
 - Alignment and selection of programs
 - When and how submission
- What factors are considered in Reviews?
- Post-submission -- award decisions?



NSF Proposal and Award Lifecycle



Pre-submission:

- ***Serve on a panel***

- Volunteer
- Contact PDs for opportunities
- Sign up for newsletters

- ***Preparation: Read the solicitation and FAQ***

- Start early: Watch the relevant websites for the release of the solicitation
- Contact your Business/Research Office (and any collaborators) ASAP
- Clearly describe the idea, how you will accomplish it, and what resources you need
- Identify and answer potential questions (what research gaps and needs?)
- Pursue something that excites ***you***



What about the CRII program?

Should I submit it to CRII first?

- The CRII program is to enable young PIs to recruit graduate students, begin research, and get preliminary results for larger proposals to continue the work.
- A PI may not submit a CRII proposal in the same calendar year in which he/she submits a CAREER proposal.

What if my CRII award and CAREER proposal are on the same topic?

- You can't be funded by two projects to do the same work.
- However, preliminary results from the CRII can be used for a CAREER project—
 - be clear on what has been/will be done with the CRII and what is proposed in a CAREER grant.

What if I have an institutional “start-up package,” a clear idea for a CAREER project, and preliminary results? Do I need a CRII grant?

- If you are ready to submit a CAREER proposal, you do not need a CRII award



Pre-submission: Topic selection and alignment

- What division/program do I submit to?
 - Read solicitations from candidate programs.
 - Do an award search using keywords.
 - Write a one-page summary of your project
 - **Talk to program directors.**
- Check out the awards of the core program of each division



Submitting: When and How

- When is the best time to submit my CAREER proposal?
 - When you have a good research idea and a well-developed, well-written proposal with:
 - An important problem, a compelling approach to solving it, and with promising preliminary results.
 - An “actionable” Broader Impact and Integration of Education and Research plan.
- What if I choose the wrong division/program?
 - Program Directors will find the best home:
 - The right community/right panel



What Factors are Considered in Reviews?

- Panel Recommendations
 - Intellectual Merit
 - Broader Impacts
 - Solicitation-specific Criteria
- Judgment of the Program Officer(s)

I have taken into account the 1) peer recommendations, 2) availability of funds, and 3) considered other proposals reviewed in this and other panels. The recommendation has also been made taking into account the specifics of the 4) program scope, the need to maintain 5) appropriate balance among subfields, 6) availability of other funding for the topic area, 7) the total amount of funds available to the program for new proposals, and 8) general Foundation policies.



Merit Review Elements

Consider the following elements in the review for both criteria:

1. What is the potential for the proposed activity to:
 - **Advance knowledge and understanding** within its own field or across different fields (intellectual merit)?
 - **Benefit society** or advance desired societal outcomes (broader impacts)?
2. To what extent do the proposed activities suggest and explore creative, original, or **potentially transformative** concepts?
3. Is the plan for carrying out the proposed activities **well-reasoned, well-organized, and based on a sound rationale**?
4. Does the plan incorporate a mechanism to **assess success**?
5. How **well qualified** is the individual, team, or institution to conduct the proposed activities?
6. Are there **adequate resources available** to the PI (either at the home institution or through collaborations) to carry out the proposed activities?



What do review panels look for?

- What problem are you trying to solve? Articulate your objectives using absolutely no jargon. (Clear summary)
 - How is it done today, and what are the limits of current practice? (Related work)
 - What's new in your approach and why do you think it will be successful? (Include preliminary work)
 - Who cares? If you're successful, what difference will it make? (Impact)
 - What are the risks and the payoffs? (high-risk, high-reward projects)
 - How much will it cost? How long will it take? (Budget; 5-year project?)
 - What are the midterm and final "exams" to check for success? (Evaluation plan)
-
- George H. Heilmeier, President and CEO of Bellcore and Director DARPA



How are decisions made as to what to fund?

After Panel Review it is a Multi-Stage Process:

- CISE has programs and/or clusters—
 - PDs holding the panel make recommendations from each panel
 - The clusters typically discuss competitive proposals across all panels to determine recommendations for funding
 - Intellectual Merit—must be good science
 - Broader Impact—must pass a bar of quality in terms of scope and “actionability”
 - Integration of research and education—key to CAREER program
- Clusters brief the division director (DD) and deputy division director for approval
- PDs write justifications, DDs concur, and if
 - a grant: send recommendations to Grants office, which has up to 4 weeks to make an award
 - PI gets anonymous reviews and panel summary along with award letter
 - If decline: PI gets anonymous reviews and panel summary along with declination letter



What do I do if I am declined?

Understanding the reasons:

- Carefully read the reviews and panel summary and ask yourself:
 - Did I select an important problem and was I clear about what it is?
 - Did I explain, with preliminary results, that my approach is credible?
 - Are the concerns critical? Are they “show-stoppers”? Addressable?
- Wait a while, reread your proposal and the reviews and re-ask the above questions
- Talk to the program director about how to improve your proposal



If declined should I resubmit the same proposal?

- Ask yourself:
 - Is this (still) an important problem?
 - Has the topic/approach been overcome by events—someone else has a better idea?
- If the topic/approach still viable:
 - Re-write the proposal—more than what is said by the reviewers to be problematic
 - Update review of the literature and add work you have done since the last proposal
 - “Addressing the reviewer concerns” may apply only to the first panel and not to totally new set of reviewers



How do I handle a declination?

- Even the most accomplished PIs get declined
- It always hurts to get declined.
- Acknowledge the disappointment to yourself and move on.



What is the good news?

- If you have a good 5-year idea in an important research topic where progress could have a significant impact on your field; and
 - You follow the advice you heard here today:
 - Start early; edit often;
 - Create a compelling narrative that unites the research under an integrated theme (ask colleagues: What am I proposing to do and how am I going to do it):
 - Show you understand the literature, where your work fits and how it will advance the current state of the art
 - Show sufficient preliminary results that convince the reviewers that you are capable of carrying out the work and the approach shows promise
 - Include a well-thought out actionable and impactful Broader Impact plan
- Well on your way to an awarded CAREER proposal



What happens if selected for award?

A program director will typically contact you to:

- Negotiate budgets if necessary;
- Require you to address reviewers' concerns;
- Ask for your input into writing a public abstract;
- Follow-up on IRB approvals, if appropriate,;
- Require that you set up a CAREER award website to showcase results and Broader Impact activities;
- Explain the expectations for content for Annual and Final reports



What about after I get the CAREER Award

- Congratulations!
- Continue
 - with the research proposed
 - Changes in scope need to be approved by your program director
 - And with the integration of research and education
 - As well as outreach
- Write “meaty” Annual Reports to keep PD abreast of work (links to code and data)
- Create a CAREER project website
 - Include research summary
 - Papers and presentations
 - Integration of research and education accomplishments
 - Outreach activities



Thank you!

Questions?

To **subscribe** to the OAC ANNOUNCE mailing list,
send an email to:
OAC-ANNOUNCE-subscribe-request@listserv.nsf.gov

CAREER **contacts:**
nsf-ccc@nsf.gov



