NSF CAREER PROGRAM and CAREER ACADEMY OVERVIEW



Jane Jacobi, Office of Research Development November 7, 2024



AGENDA

1. Office of Research Development

2. NSF CAREER Program

3. ORD CAREER Academy

4. Questions



What is the Office of Research Development?

ORD is the central research development unit at Clemson.

We offer services and programs that transcend disciplinary barriers and spur discovery and collaboration.





What does the Office of Research Development do?

ORD engages faculty in strategic, proactive, catalytic, and capacitybuilding activities that

- advance research
- foster a "research culture"
- increase institutional competitiveness for funding



Faculty Support

- Offer early career training (CAREER Academy, NIH Accelerator)
- Provide proposal development support
- Run workshops/info sessions
- Manage R-Initiative funding opportunities
- Provide networking opportunities such as TigerSphere
- Manage proposal repository

Institutional Advancement

- Support CU mission and Clemson Elevate goals for research
- Build highly effective interdisciplinary teams for large grant proposals
- Position Clemson to leverage its strengths to enhance its research portfolio
- Coordinate with research development staff across campus to achieve synergies

Funding Landscape

- Monitor changes in agency priorities and programs
- Administer limited
 submissions process
- Strategically position faculty to be more competitive in a constantly shifting grants environment
- Foster nimbleness in faculty responses to funding opportunities



OFFICE OF RESEARCH DEVELOPMENT

Shelia Cotten, PhD Associate Vice President for Research Development





Jane Jacobi Team Lead Brett Levi Program Manager Morgan Simpson Research Development Specialist Brad Walters Program Manager





NSF CAREER Program



NSF CAREER PROGRAM

- CAREER awards are NSF's most prestigious awards in support of early-career faculty with potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization. Activities build a firm foundation for a lifetime of leadership in integrating education and research.
- Number of awards: Approximately 3,000 applicants submit proposals in a "normal" year. Only 500 are funded/year.
- Due: July 25, 2025
- www.nsf.gov/pubs/2022/nsf22586/nsf22586.pdf



CAREER ELIGIBILITY

A proposer must meet all of the following eligibility requirements as of the annual deadline:

- Hold a doctoral degree in a field supported by NSF
- Be engaged in research in an area of science, engineering, or education supported by NSF
- Hold at least a 50% tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title)
- Be untenured
- Cannot have received a CAREER award previously.



CAREER PROPOSAL INTENT

The CAREER proposal is about you and your development as an academic researcher and educator over the next five years ... and beyond.

Your CAREER proposal details how you will spend \$500,000+ of taxpayer money to advance your discipline (intellectual merit) and increase the societal impact of your work (broader impacts).

Thus, as a writer, you have a dual intent: to promote both personal and public agendas.



INITIAL STEPS

Prospective CAREER applicants have to wrestle with tough questions:

- What do I want to leave as my legacy as a researcher and an educator?
- What can I claim as my niche? What unique contribution do I dream of making to my department, my college, my institution, my discipline?
- If I accomplish my objectives, what will be the benefit? Will I be better off for the effort? Will the world be better off?



NAVIGATING THE NSF MAZE

- Directorates, divisions, programs . . . Seems labyrinthine!
- To which NSF program should I submit my proposal?





CONSULT THE NSF WEBSITE

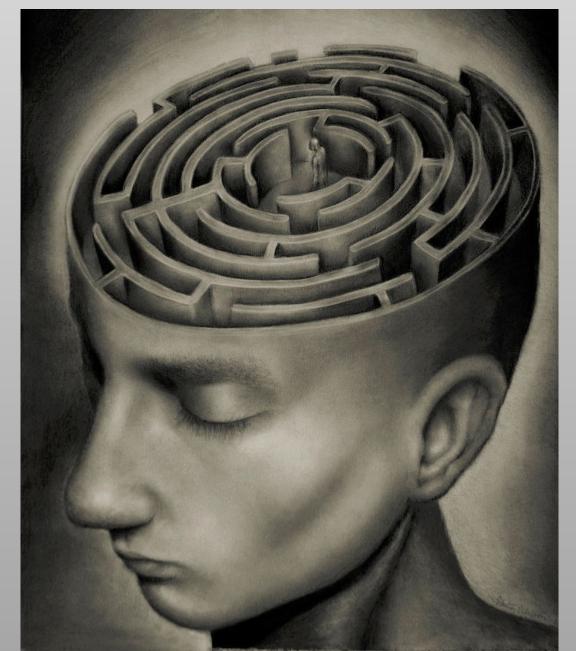
- Drill down from directorates to divisions and then to programs.
- Only "programs" participate in the CAREER solicitation.
- Multiple programs may fund a single proposal.
- Search the NSF funding database for projects awarded by specific programs.
- Read a sample of project abstracts to see if you have found "your people."



WHERE DOES MY RESEARCH FIT?

My research cuts across multiple programs . . . It fits in between multiple programs . . . It could fit in either program A or program B.

Contact Program Directors or division contacts: http://www.nsf.gov/crssp rgm/career/contacts.jsp



APPROACHING PROGRAM DIRECTORS

Program directors' success is determined by the success of their programs and the corresponding communities. You are a piece in the NSF reward system.

They are highly motivated to support and expand the community by encouraging and mentoring the next generation of thought leaders.

Program directors are (usually) nice people who have your best interests in mind. Don't hesitate to reach out to them.

Request feedback on a 1- to 2-page document.



READINESS TO SUBMIT

What factors should I weigh in deciding to submit an NSF CAREER proposal instead of another type of proposal?

Issues: Enough time

Number of NSF months already committed

Networks/contacts sufficient to facilitate education and outreach activities

Availability of students and collaborators

Amount of the award vs NSF expectations of effort



READINESS TO SUBMIT

Is it the right time in my career arc to submit?

Options:

- Get the CAREER award as early as possible to help bootstrap your research and education program
- Hold onto your first of three shots until you know what you're doing
- Write multiple 1-pagers and get feedback and guidance from ADRs, mentors, Program Directors, ORD.



WINNING

- Present an idea matching an NSF program interest AND prove it is innovative.
- Tackle a timely problem with potential for significant impact (departmental, institutional, cross-disciplinary, societal).
- Lay out a logical, realistic plan for accomplishing the work in the five-year time span. Partner with others as necessary to achieve desired outcomes and minimize risk.
- Find a way to integrate education plan with research plan.
- Include an evaluation mechanism and even an evaluator.



WINNING

- Convince the readers that you have the potential to serve as an academic role model in research and education.
- Demonstrate to the reviewers that you are well-positioned to lead advances in the mission of your department, organization, and discipline.
- Prove to the panel that faith in you will rewarded
- Prove to the panel that the funding you seek will build a foundation for a lifetime of leadership in integrating education and research.
- Prioritize audience needs and engage readers. Your voice is key.



LOSING

- Lack of unique approach to research and education
- Focus on applied rather than fundamental science
- Unclear methods/insufficient citations in research or education plan
- A missing or lukewarm department chair letter ("damning with faint praise")
- A badly written budget or budget justification (regulations are not followed, costs are not warranted, no funding for education or outreach activities listed in proposal)



What is the funding record for CAREER awards across different directorates/programs? Trends for CAREER follow general funding patterns in directorates and programs; see https://dellweb.bfa.nsf.gov/awdfr3/default.asp

Does having or not having other NSF funding affect my chances of winning a CAREER award? No.

What is the average amount of funding? \$750,000 for 5 years. Can go over \$1 million!

Will reviewers expect to see (published) preliminary data Depends on the program. Ask the Program Director. **RES**



How important is it to have previous publications on the proposed topic? Peer-reviewed publications are a plus, but I have never seen CAREER reviews explicitly calling out an early-career writer for not having them.

How critical is "socializing" your proposal (or general ideas) ahead of time with PDs and the community? I think this is a must. To some extent you have to "work the crowd."

Does the CAREER program welcome high-risk research topics? Yes, as long as you have a risk management plan. They want to feel that their investment will be protected.

Will the grant pay for equipment? Yes. Not major equipment for equipment of RESEARCH though.

What constitute "tie breakers" between multiple good proposals? Excellent evaluation plan, a theory guiding the education plan, sufficient citations in the education section, sound integration of research and education, serious attention to stakeholders and broader impacts. Innovative and evidence-based outreach. A fabulous department chair letter.

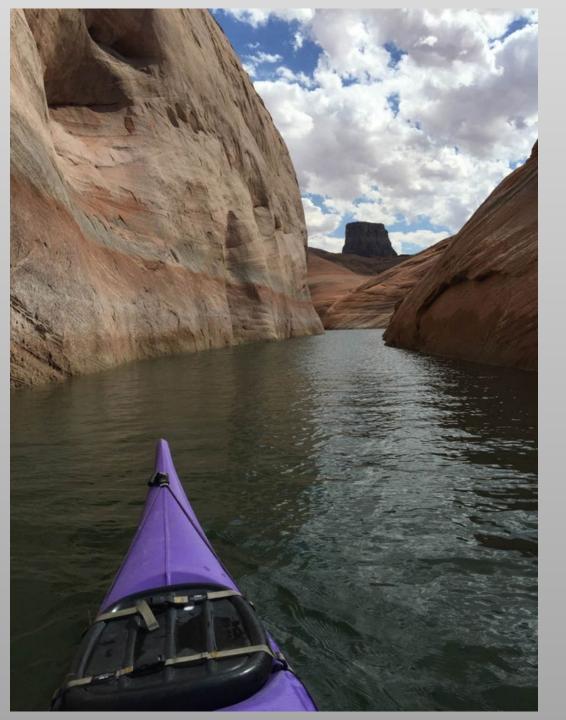
Do the prior work and credentials of the proposal writer play into whether the proposal finds success? Yes for prior work, no for credentials if by that one means academic pedigree.

Can I have collaborators? Yes. You just cannot have co-Pland Collaborators can be allocated funds in the budget. RES

May I submit a CAREER proposal and another proposal on a different topic to NSF in the same year? Yes, but only if the research is substantially different. If you are planning to submit a CAREER proposal and another proposal to the same NSF program, please contact the Program Director to discuss your individual case.

Will the grant pay for students or postdocs? Yes. Woohoo! You probably would not have enough \$\$ for a postdoc, though.





ORD CAREER Academy



CAREER ACADEMY 2025

- Ninth cohort!
- Our CAREER Academy is designed to help you win.
 Academy participants have a higher rate of success than do non-participants.
- Academy participants learn strategies relevant not only for the CAREER proposal but for all proposals.
- Two tracks: Track 1, for faculty who have not previously submitted to the CAREER program; Track 2, for faculty who have previously submitted a CAREER proposal or are Academy returnees.
- There is no limit on the number of times you can participate in the Academy.



CAREER ACADEMY 2025

- Application window will open November 7 and close December 7. Look for an email and a link on our webpage!
- Notification of acceptance: December 8.
- Criteria for acceptance: Number of previous attempts, fit with NSF areas, anticipated tenure date, balance among colleges.
- Runs from January through July. Comprises presentations, group activities, peer reviews, individual consultations, heavy-duty editing. We have contact of some sort every week.
- In January, individual Zoom conferences with accepted participants will be held to gauge readiness and tailor materials.
- All workshop sessions are held over Zoom and recorded.



CAREER ACADEMY 2025

Special benefits for Academy participants:

- Privileged access to ORD editors after the Academy for other types of proposals, regardless of dollar value. We invest in your potential over the long term.
- Potential to receive feedback on CAREER proposal from outside reviewers with subject-matter expertise (limited number of slots available, depending on VPR budget).
- Debriefing to go over panel reviews and plan follow-up strategy.
- Structured networking with other early-career faculty. Benefit from others' expertise. Make friends!





QUESTIONS?

Contact me: jacobij@clemson.edu

Browse the ORD website:

https://www.clemson.edu/re search/division-ofresearch/offices/departmen t-ord/index.html

