NSF CAREER Workshop

Tuesday, March 14, 2023

Presented by the

Office of Research Development,

Florida State University





Agenda







OVERVIEW OF THE PROGRAM

OVERVIEW OF THE PROPOSAL

RESOURCES & INFORMATION ABOUT UPCOMING TRAINING SESSIONS

NSF CAREER Proposal Overview

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CAREER-What is it?

- It's a foundation-wide activity
- It's NSF's most prestigious award in support of early-career faculty who have the potential to serve as academic role models in research and education and to lead advances in the mission of their department or organization."
- It's not an acronym. It is the goal. It is an opportunity to build a firm foundation for a <u>lifetime career</u> of leadership in integrating education and research.

Why should I apply?

- This funding is earmarked specifically for pre-tenure faculty and 500 awards per year are estimated.
- 5 years of continuous funding
- Your dean/chair will be very happy with you
- Looks very good as you go up for tenure
- \$5,000 increase in your base salary
- It benefits both you and the university

When should l apply?

- You have three chances at the CAREER award before you are tenured.
- When you have some preliminary work
- When you have time to put together a quality proposal

Am I Eligible? (Tenure Track Considerations)

- 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 at time of submission;
- Have not previously received a CAREER award.
- Have not already applied more than twice.
- Have both research and educational responsibilities at the eligible institution

Eligibility (Non-Tenure Track)

- Any non-tenure-track faculty is potentially eligible
- Continuing appointment that is expected to last the five years of the CAREER award
- Appointment has substantial research and educational goals
- Early career equivalent to pre-tenure
- All other eligibility requirements also apply
- Eligibility certified in Departmental Letter

CAREER vs. Regular Proposal: The differences

- CAREER is a single PI proposal
- Your research and education are much more important, and they must be integrated, innovative and ambitious
- You must have a departmental chair letter
- This is as much about you and your career as it is the research.

CAREER Program (NSF 22-586)--Revisions

Was applicable last year as well.

- Addition of a clarification sentence in the departmental chair letter to state that the <u>Chair Letter is not a support letter</u>.
- Inclusion of new single copy document for PIs to include that states their eligibility for PECASE. It is not a required document.
- CAREER submission will be through Research.gov or Grants.gov.

Which program is the best fit?

- Contact relevant Program Directors to discuss your ideas and seek more information. If need help to identify a suitable program, visit the Division Contacts Page: http://www.nsf.gov/crssprgm/career/contacts.jsp
- NSF's <u>Guide to Programs</u> is recommended to help you to determine where the correct fit might be.
- For interdisciplinary proposals, contact all relevant Program Directors or Division Contacts
- Talk to your colleagues and mentors

Proposal & Budget Limits

- **Proposal** Limits: One annually; no more than three total.
- **Budget** Limits: There is no maximum.
 - The minimum, including indirect costs, is \$400,000 for the 5-year duration, with the following exception:
 - Awards for proposals to the Directorate for Biological Sciences (BIO), or the Directorate for Engineering (ENG) are expected to total a minimum of \$500,000 for the 5-year duration

Proposal Deadline for 2023

5:00 p.m. July 26 All Directorates

Due to SRA Friday, July 21st at 9am

Work backwards to determine your timeline

- Planning to have your proposal go through mock review?
- Planning to work with a writing group?
- Planning to go on vacation between now and the deadline?
- Visit the CAREER Toolkit to view a potential timeline.



NSF CAREER Proposal Overview

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Proposal Structure

- Cover Sheet
- Project Summary
- Table of Contents (generated automatically)
- Project Description (15 pages)
- References Cited
- Budget and Budget Justification
- Facilities, Equipment, and Other Resources
- Senior Personnel Documents
 - Biographical Sketch
 - Current and Pending Support
 - Collaborators and Other Affiliations
 - Departmental Letter
 - Data Management Plan
 - Post-Doc Mentoring Plan (if applicable)

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Project Summary

- 1-page Limit
- Must Have Sections:
 - Overview
 - Intellectual Merit
 - Contribution you will make to science
 - Broader Impacts
 - Contribution you will make to society
- Self-contained, overview of the entire project
- First Impression
- Most likely document to be read by public, journalists, politicians
 - No jargon, focus on significance of work

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Project Description

- 15-page limit
- Description of the proposed research project, including preliminary supporting data where appropriate, specific objectives, methods and procedures to be used, and expected significance of the results;
- Description of the proposed educational activities and their intended impact;
- Description of how the research and educational activities are integrated or synergistic;
- Description of other broader impacts, besides the education activities, that will accrue from the project; and
- Results of prior NSF support, if applicable.

13 Questions to Answer in your Project Description

- 1. What are your long-term career goals and how will CAREER funding enable them?
- 2. What is your research hypothesis?
- 3. Why is this project important?
- 4. What is the potential for the proposed activity to
 - a. advance knowledge and understanding within its own field or across different fields (Intellectual Merit); and
 - b. benefit society or advance desired societal outcomes (Broader Impacts)?



13 Questions you will need to answer in your Project Description

5. Do your proposed activities suggest and explore creative, original, or potentially transformative concepts?

- 6. How well qualified are **you** to conduct the proposed activities?
- 7. What are the specific research and educational goals of the project?
- 8. What specific tasks and activities are planned?
- 9. How will you evaluate the success of these tasks?

13 Questions you will need to answer in your Project Description

- 10. What is the timeline for completing the proposed tasks?
- 11. Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?
- 12. How will the work influence other work to be done in the future?
- 13. Is the plan for carrying out the proposed activities well-reasoned, wellorganized, and based on a sound rationale?

Integration of Research and Education

Proposals <u>must</u> have an integrated research and education plan at their core.

These plans should reflect your disciplinary and educational interests and goals, as well as the needs and context of FSU.

A wide range of research and education activities may be appropriate for the CAREER program Education Activities Examples

- incorporating research activities into undergraduate courses;
- teaching a graduate seminar on the topic of the research;
- designing innovative courses or curricula; providing mentored international research experiences for U.S. students;
- linking education activities to industrial, international, or crossdisciplinary work;
- supporting teacher preparation and enhancement;
- conducting outreach and mentoring activities to enhance scientific literacy or involve students from groups that have been traditionally underrepresented in science;
- researching students' learning and conceptual development in the discipline;
- implementing innovative methods for evaluation and assessment;
- creating cyberinfrastructure that facilitates citizen science

Budget- What is Allowable?



- Allowable costs include funds for postdoctoral fellows, graduate students, undergraduate students, PI salary, education or outreach activities, support for an evaluator, travel and subsistence expenses for the PI and U.S. participants when working abroad with foreign collaborators, and consultant expenses.
- Request for support of other senior personnel, consultants, or sub-awards is allowed, commensurate with a <u>limited role</u> in the project
- Unfunded collaborators like should also have a <u>limited role</u> in the project's intellectual merit and broader impacts
- You cannot include voluntary cost-share
- If an activity is in the proposal, it needs to be:
 - In the budget, or
 - Explained why it's not in the budget

Current & Pending Support and Facilities Statement



- Current and Pending
 - A separate document prepared through the use of SciENcv.
 - Make sure to include both external and internal (FSU) awards and the CAREER proposal, labeled "This Proposal".
- Facilities Statement
 - Used to give the reviewers the confidence that you have the resources available to be successful
 - Describe the facilities/equipment/resources that you will need for THIS project
 - Links to College/Department facilities pages on ORD website

Departmental Letter- 2 pages max



- Statement indicating the PI's eligibility for the CAREER program
- Description of how the PI's career goals and responsibilities mesh with that of the organization and department
- Commitment to the PI's proposed CAREER research and education activities
- Description of how the department will contribute to the professional
 - with mentoring and whatever is needed to further the PI's efforts to integrate research and education
- Addition of a clarification sentence in the departmental chair letter to state that the <u>Chair Letter</u> is not a support letter.

Note: The Departmental letter is not a letter of support but should address these items above.

Letters of Collaboration



- MUST follow specific format
- Describe nature of and need for collaboration in the proposal narrative

"If the proposal submitted by Dr. [insert the full name of the Principal Investigator] entitled [insert the proposal title] is selected for funding by the NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description or the Facilities, Equipment or Other Resources section of the proposal."

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Data Management Plan and Post-Doc Mentoring Plan





Data Management Plan

Resources available on NSF CAREER Toolkit, and at FSU Libraries All proposals must have a Data Management Plan

Post-Doc Mentoring Plan

If applicable

(Typically, CAREER budgets are not large enough to support this)

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Other Considerations

Program Officers will return without review any proposal that is noncompliant with the PAPPG because:

The proposed work duplicates, or is substantially similar to, a proposal already under consideration by NSF from the same submitter

The proposal was previously declined and was not revised to take into account the major comments from the prior NSF review

The proposal topic falls outside the purview of NSF



Mock Review

- This is an internal review of your proposal
- Included will be three more senior faculty, with at least one CAREER awardee in your discipline, if possible
- 1-hour recorded session via Zoom

You must notify Beth <u>by the end of May</u> if you plan to go through a mock review.

All mock reviews will take place between June 28 and July 7. Your project summary must be completed 1.5 weeks prior so that it can be provided to reviewers.



Resources to Bookmark

NSF CAREER Toolkit https://www.research.fsu.edu/research-offices/ord/

NSF CAREER Website

https://beta.nsf.gov/funding/opportunities/faculty-early-career-development-program-career

NSF CAREER Solicitation

https://www.nsf.gov/pubs/2022/nsf22586/nsf22586.htm

NSF PAPPG

https://beta.nsf.gov/policies/pappg/23-1

Upcoming Workshops



Final Thoughts

- Start Early
- Contact your program officer early
- Read the solicitation multiple times before you start writing
- Read/review several successful proposals before you start writing.
- Contact Beth at ORD if you have any questions
- Plan to go through a mock/peer review session

Questions?





Visit ORD.FSU.EDU

Thank you.

Beth Hodges, Director Research Development Florida State University bhodges@fsu.edu