

# National Science Foundation

## Faculty Early Career Development Program (CAREER)

# Overview

- What is the CAREER program?
- Insights and Tips
- Writing Your Proposal
- ORSP Services and Contact Information

# ***What is the CAREER Program?***

# What is the Faculty Early Career Development (CAREER) Program?

- Foundation-wide activity that supports junior faculty for up to five years
- Enables awardees to develop careers as outstanding researchers and educators who effectively integrate teaching, learning, and discovery
- Builds a foundation for a lifetime of integrated contributions to research and education
- Provides incentives to universities to value the integration of research and education

# CAREER Program Highlights

- Deadline: **July 27, 2020**
  - Subject to new PAPPG guidelines
- Strict eligibility requirements
- Project period is five years
- Budgets should be at least \$400,000 for the 5-year duration.
  - BIO, ENG, and OPP projects should be at least \$500,000 over 5 years.
- Co-PIs are not allowed

# Investigator Eligibility Criteria

PI must:

- 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 position as an assistant professor (or equivalent)
- Be untenured as of the application deadline
- Have not previously received a CAREER award

# ***Insights & Tips:***

*Ways to increase your  
chances of receiving funding*

# Develop Your Foundation

- Establish yourself – Develop a track record in the field beyond your dissertation
  - Establish a research umbrella with an eye for at least the next 10 years
  - Apply to small funding opportunities & NSF core programs early
  - Increase publications and collaborations
- Find your fit - Ensure that you're applying to the appropriate directorate
  - Become familiar with the Directorate's portfolio of awards
  - Know the Directorate's cross-cutting priorities
  - Serve as a reviewer
- Build relationships - Talk with the Program Officer at NSF for your specific content area about your project plan
  - Leverage your mentors

# Drafting a Whitepaper

- Succinctly describing your proposed research is key in planning stages.
- Prepare a 1-page white paper that describes your project in three paragraphs:
  - Paragraph 1: Description of project
  - Paragraph 2: “The intellectual merit of this project is...”
  - Paragraph 3: “The broader impacts of this project are...”
- This document can be shared with program officers, your mentor. Your department head and any other individuals who can help you hone and perfect your research plan.

# Tips for Talking with the Program Officer

- Schedule a phone call
- Contact all relevant program directors
- Share your Whitepaper in advance of the call
- **Be prepared to succinctly answer the questions:**
  - What is your research objective?
  - What is your education plan?
  - How are your research plan and education plan integrated?
  - What is the Intellectual Merit of your proposal?
  - What are the Broader Impacts of your proposal?
- Remember the program officer is not the panel

# Questions for the PO

## Ask the PO impactful questions

### Do Ask:

- Does my research objective fit well with your program?
- Did I formulate a clear research objective?
- Is my research objective properly focused?
- What is your funding policy for CAREER awards? What is the maximum size of your CAREER awards? (Remember, the minimum is \$400,000)
- How are CAREER proposals submitted to your program reviewed?
- My research touches multiple Directorates and programs, which is the best one to apply to for this project?

### Don't Ask:

- Is NSF interested in my topic?
- So, will you fund my research?
- Is this a good research topic?
- What research topic do you think I should work on?
- What are my odds?
- But this is my last chance, what can I do?
- If I send a copy of my proposal to you, will you help me edit it?

# *Writing your proposal*

# Benchmarks and Timeline

Due on or before:	
May 29	Meet individually with a Grants Specialist to discuss CAREER proposal
29	Discuss your proposal with your Department Head to secure institutional support including potential for release time from courses
29	Contact an NSF Program Officer to discuss your CAREER proposal ideas
June 2	Secure approvals from partner organizations such as HCDE, EPB, etc.
12	Complete 1 <sup>st</sup> rough draft of proposal for review and critique
19	Meet with Grants Specialist to develop / finalize budget
30	Initiate proposal in NSF Fastlane and share with your Grant Specialist
July 7	Complete 1 <sup>st</sup> draft of collateral documents, including budget justification
17	Incorporate revisions from external reviewers and finalize all documents, <i>including all letters</i>
17	Enter and route proposal in Cayuse for approvals
22, 23, or 24	Schedule a submission meeting with ORSP. Note that there will be multiple CAREER proposals being submitted so schedule your timeslot early.

# Important Considerations

- Follow the guidelines in the solicitation as strictly as possible
  - A former NSF PO\* said that nearly 2/3 of proposals are returned without review for not following directions
- Write early – Leave time for review
  - Feedback from mentors or external reviewers is critical for high quality proposals
  - If you submit early enough, technical issues can be discovered and fixed!
- The PAPPG has been updated as of June 1, 2020!
  - Make sure your documents follow the newest guidance – found here:
    - [https://www.nsf.gov/pubs/policydocs/pappg20\\_1/pappg\\_2.jsp#IIC2f](https://www.nsf.gov/pubs/policydocs/pappg20_1/pappg_2.jsp#IIC2f)

# Important Links

- **NSF CAREER website:**

[http://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=503214](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=503214)

- **NSF CAREER solicitation:**

<https://www.nsf.gov/pubs/2020/nsf20525/nsf20525.htm>

- **CAREER FAQ:**

<https://www.nsf.gov/pubs/2020/nsf20025/nsf20025.jsp>

# Distinguishing Characteristics

## **Vision:**

- A CAREER development plan should build a firm foundation for lifelong contribution of integrated research and education.
- A well thought out plan with a future vision is key.
- The reviewers will be looking for this vision along with solid technical content, novel ideas, and convincing methodologies by which the goals put forth in the proposal can be achieved.

## **Clarity:**

- Position your proposal for a diverse audience.
- The review panel is extremely likely to include members who have little knowledge in your field.
- Don't dilute the technical content, but ensure it is methodically articulated with clear objectives and tasks, relevant assumptions, systematic technical methodologies, etc.

## **Integration of Research and Education:**

- Critically assess unique features in the proposed research topics that can be linked to the educational activities.
- This should be integrated into the research, not an add-on or afterthought

# Proposal Development Tips

- **Learn from others** - Review funded proposals
- **Ramp up your research** – Ensure that it “advances the field”
- **Ramp up your education plan** - Ensure that it contributes to broader impacts
- **Stretch yourself** - Be ambitious but not unrealistic
- **Be vulnerable** - Ask colleagues to review your proposal, even those from outside your field

# CAREER Merit Review Criteria

- The following elements are considered in the review for **both Intellectual Merit and Broader Impacts**. What is the potential for the proposed activity to:
  - advance knowledge and understanding within its own field or across different fields;
  - benefit society or advance desired societal outcomes (Broader Impacts)
  - suggest and explore creative, original, or potentially transformative concepts?
- Is the plan for carrying out the proposed activities well-reasoned, well-organized, and based on a sound rationale? Does the plan incorporate a mechanism to assess success?
- How well qualified is the individual, team, or institution to conduct the proposed activities?
- Are there adequate resources available to the PI (either at the home institution or through collaborations) to carry out the proposed activities?

# Common Pitfalls

- Project description is too dense, difficult to read.
- Research doesn't read as novel; does not describe how it will advance the field.
- Education plan is not integrated with research plan.
- Specific aims/objectives are **too dependent** on one another.
- Does not detail specific outcomes, milestones, metrics, and timelines.
- Too much narrative spent on background.

# NSF Proposal Development Resources

- [Career FAQs](#)
- [12 Tips from an NSF Program Director](#)
- [NSF CAREER proposal Writing Tips](#)

# CAREER Proposal Development Services

With enough lead time, we can:

- Provide outline and/or template documents for the proposal narrative and other CAREER application components
- Provide proposal component checklists and timelines
- Provide editorial review/ feedback on the proposal narrative, project design, budget, and other components
- Assist with grantsmanship and rhetorical strategies
- Coordinate with internal and external partners (collaborating institutions, community partners, local schools, etc.)
- Assist with securing data needed for proposal

# Our Other Services

- Identifying Funding Opportunities
- Supporting Research & Proposal Development
- Coordinating Submission and Award Processing
- Enabling & Celebrating Research Success

# Other Grants Administration Resources

Bailey Kirby

Grants Administrator

SimCenter

423-425-5433

[bailey-kirby@utc.edu](mailto:bailey-kirby@utc.edu)

Ashley Ledford

Grants Administrator

College of Arts and  
Sciences

423-425-4809

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# ORSP AT YOUR SERVICE!

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