



The Who, What, When, Why, and How Much?

NSF CAREER VEHICLE OVERVIEW

CAREER Program Description

- **WHO?** The Faculty Early Career Development (CAREER) Program is open to junior faculty members at all CAREER-eligible organizations.
- **WHAT?** The CAREER Program supports junior faculty who exemplify the role of **teacher-scholars** through outstanding research, excellent education, and the integration of education and research **within the context of the mission of their organizations.**
- **WHY?** To build a firm foundation for a lifetime of leadership in integrating education and research.

Eligibility

- By the Directorate's deadline for submission of CAREER proposals, **PIs must meet all of the following eligibility requirements:**
 - Hold a doctoral degree
 - Be untenured until October 1 following the deadline
 - Have not previously received a CAREER or NSF PECASE award (**prior or concurrent Federal support for other types of awards or for non-duplicative research does not preclude eligibility**)
 - Be employed in a tenure-track (or tenure-track-equivalent) position as an assistant professor (or equivalent title) at an accredited U.S.
- Note that PIs who are **Associate Professors** or in equivalent appointments, with or without tenure, **are not eligible** for the CAREER program.
- **Competition Restrictions:**
 - A Principal Investigator may submit only one CAREER proposal per annual competition
 - A PI may not participate in more than three CAREER competitions. Proposals that are not reviewed (i.e., are withdrawn before review or are returned without review) do not count toward the three-competition limit.

Caveats and FYIs

- Success rates in many divisions are around 10%; you will likely submit a CAREER application more than once.
- The CAREER award must be relinquished if the PI:
 - transfers at any time prior to or during the award period to a position that is not either tenured, tenure-track, or tenure-track equivalent; and/or
 - the new organization is not CAREER-eligible.

Q: Will receiving a grant from the NSF or a private agency such as the American Cancer Society, change your status as a New Investigator from NIH's perspective?

A: No, NIH New Investigator status is determined solely by your NIH award history.

Submission Deadlines

Full Proposal Deadlines (due by 5 p.m.):

- First deadline:
 - Directorate for Biological Sciences (BIO)
 - Directorate for Computer & Information Science & Engineering (CISE)
 - Directorate for Education & Human Resources (EHR)
- Second deadline: Engineering (ENG)
- Third deadline:
 - Directorate for Geosciences (GEO)
 - Directorate for Mathematical & Physical Sciences (MPS)
 - Directorate for Social, Behavioral & Economic Sciences (SBE)
- <https://www.nsf.gov/pubs/2017/nsf17537/nsf17537.htm>

Directorate	2018 due dates	2019 due dates
BIO, CISE, EHR	July 18, 2018	July 17, 2019
ENG	July 19, 2018	July 18, 2019
GEO, MPS, SBE	July 20, 2018	July 19, 2019

Help!



- Grant Managers
 - Budgets, Biosketches, SPS, ORS liaison
- Mentors and Peers
 - Critical reviewers of your proposal
 - Ask for and read winning proposals
- Research Development Staff
 - Templates, editing, writing, formatting, strategy
 - Website: <http://admin.trinity.duke.edu/research-development>
- **You:** Begin proposal development at least 3 months out, and plan to submit early!



The Devil is in the Details

THE CAREER APPLICATION

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The Structural Basics

- The essence of a good proposal – Clear, Concise, Correct, Compelling, Complete
- **Project Summary**—One Page to Glory!
 - Written for an educated layperson
 - Must cover objectives, intellectual merit and broader impacts
- **Project Description**—Your Career Development Plan in 15 pages
 - Vision, Objectives, Expected Significance
 - Research Plan with Preliminary Data
 - Education Plan
 - Integration of Research and Education
 - Broader Impacts
 - Prior NSF Support, if any
- Strike a good balance between research objectives (2/3 or 10-12 pages) and educational objectives (1/3 or 3-5 pages)

Evaluation Criteria



- NSF funds scientific research not development
 - Clearly state your research objective up front
 - Lay out methodology and chronological plan with metrics
 - Repeatable and verifiable
- Your idea must be research worthy, original, evidence-based, and knowledge-advancing (**Intellectual Merit**)
 - Be bold and brave: Propose significant leaps forward not incremental steps
 - Address contingencies
 - Reference seminal literature

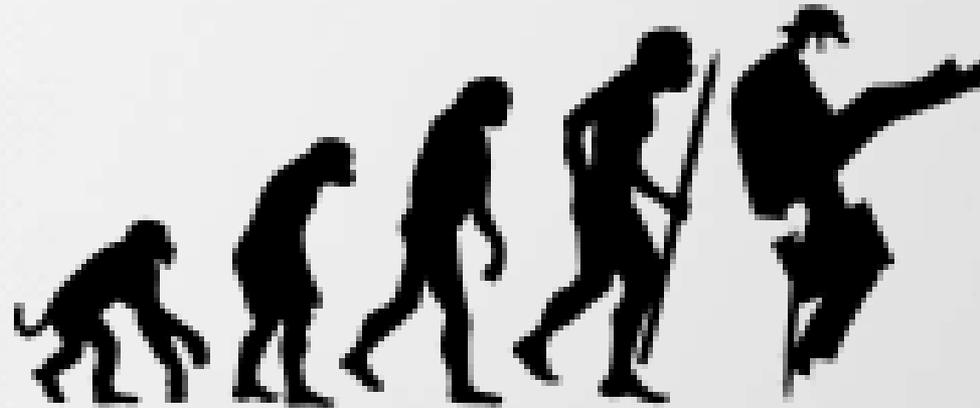
Budget Details



- **Budgetary Limitations:**
 - For all **Natural Sciences**-related directorates: The **minimum** CAREER award size is \$400,000 (total costs) for a five-year period except for the Directorate of Biological Sciences (BIO) and Polar Programs (PLR), where **minimum** award size is \$500,000.
 - For all Directorate of **Engineering** divisions, the **minimum** award size is \$500,000.
 - Minimum may equal Maximum. Negotiation is VERY likely.
- Support for senior personnel is allowed only for the PI's salary.
- Allowable costs include funds for postdoctoral fellows, graduate students, undergraduate students, summer 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.

Jory Weintraub

BROADER IMPACTS



Exercise

THE EVOLUTION OF A PROJECT SUMMARY

How do you spell WINNER?



TIPS FROM WINNERS AND PROGRAM DIRECTORS

Award Winning Advice



- Start planning early—target 6 months ahead
- Read winning proposals and identify mentors
- Plot your career trajectory; how will CAREER launch it?
- Know the mission of your department/school/university; craft a career path that integrates components of the mission and aligns your research with that mission
- Establish your track record through preliminary results, independent publications, prior funding, letters from collaborators
- **Communicate with enthusiasm!**

Award Winning Advice



- Make sure that the research objectives are repeated word for word throughout, as changes in wording could cause confusion among reviewers
- Make sure that your research can reasonably be accomplished within the 5-year time frame and that you communicate this clearly
 - Establish a logical chronological plan of activities
 - Identify benchmarks and/or metrics of success
 - Identify major questions that must be answered
 - Lend credibility to your proposal by identifying appropriate collaborators



Program Officers Speak

- **The most important thing to do** is to identify the program officer for the work and to touch base with him or her with a BRIEF e-mail, maybe one page or so, describing the work to make sure that the work fits that program. If you are unsure of a program's contacts, see <http://www.nsf.gov/crssprgm/career/contacts.jsp>
- Follow the submission guidelines
- Have someone review your submission for formatting, grammar, and spelling



Program Officers Speak

- Volunteer to participate in a panel review
 - Opportunity to meet your program officer and build a relationship
 - Meet panelists who may review your proposals in the future
 - Great learning experience for new professors (pre-CAREER)
 - See the reviewing process from inside out
 - See commonalities of good proposals
 - Demonstration of PI competence
 - Testable hypothesis
 - Compelling preliminary data

RECAP

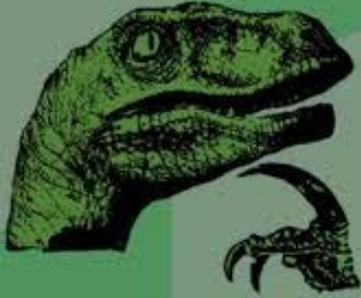
- Plan Your Strategy
- Talk to Your Program Officer
- Write Your Project Summary
- Get Feedback
- Write Your Proposal
- Get Help & More Feedback
- Submit Early



Contact Us

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Atoms and particles behave in probabilistic ways, but our mind is made of atoms and particles...



How can free will exist?



QUESTIONS?

I will not ask dumb questions
I will not ask dumb questions

