



NSF CAREER Workshop 2015

Faculty Early Career Development Program

Program Solicitation: NSF 15-555

Engineering Research and Graduate Programs

College of Engineering

May 21, 2015



NSF CAREER 2015

Agenda

- CAREER submission and award experiences – Gurpreet Singh, Mechanical and Nuclear Engineering Dept.
- Overview of the CAREER solicitation, GPG requirements, and available resources – Carole Lovin, ERGP
- NSF merit review criteria, CAREER proposal tips from NSF, and other important tips – Mary Lou Marino, ORSP
- PreAwards assistance and proposal preparation tips – Anita Fahrny and Effie Swanson, PreAward Services
- Evaluation plan tips – Katie Allen, OEIE
- Q&A



NSF CAREER Program

CAREER: The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of 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.

CAREER Solicitation, Synopsis of Program



Goals of the CAREER Program

- Provide stable support for five years (\$500k in ENG) to facilitate the career development of outstanding new teacher-scholars
- Build a foundation for a lifetime of integrated contributions to research and education
- Provide incentives to universities to value the integration of research and education
- Have appropriate scope of education and research activities – a 5-year plan, not a lifetime

Henry Warshall
Deputy Division Director
Chair, CAREER Coordinating Committee
April 2015 Presentation



Investigator Eligibility Criteria

- Hold a doctoral degree in a field supported by NSF by proposal due date
- Be untenured up until Oct 1 following the due date
- Be employed in a tenure-track (or equivalent) position at an eligible institution as an Assistant Professor (until Oct 1 following due date)
- Have not previously received a CAREER award
- Have not previously had more than two CAREER proposals reviewed previously

Where to start?

CAREER FAQs – NSF 15-057

B.1 Proposal Preparation

21. What is the best place to start when preparing a CAREER Proposal?

Read the Solicitation thoroughly before starting and refer to it as you write your proposal. Discuss your plan with your Department Chair, personal and academic mentors, and individuals that have been successful obtaining awards from NSF. We also encourage you to contact your Program Officer, or the appropriate Division contact for CAREER listed at <http://www.nsf.gov/crssprgm/career/contacts.jsp>



CAREER Solicitation vs. GPG

- NSF Grant Proposal Guide (GPG) – standard guidelines for all proposals submitted to NSF
- CAREER Solicitation – modify the general provisions of the GPG and in such cases the solicitation must be followed where there are differences with the GPG.
- Always follow instructions stated as “must” or “required” in either document!



CAREER Solicitation

Program Description Requirements

All CAREER proposals must have an integrated **research and education plan** at their core. Work with your department head or mentor to develop your project description.

The Project Description should include:

- a 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;
- a description of the proposed educational activities, including plans to evaluate their impact on students and other participants;
- a description of how the research and educational activities are integrated with one another; and
- results of prior NSF support, if applicable ([GPG 15-1, Section II.C.d.iii](#))



CAREER Project Description

Additional areas encouraged for CAREER proposals:

- Cross-Disciplinary Perspectives
- International/Global Dimensions
- Education Activities - Proposed education activities may be in a broad range of areas and may be directed to any level: K-12 students, undergraduates, graduate students, and/or the general public, but should be related to the proposed research.



CAREER Proposal Content

- References Cited: Include for both research and education aspects of the proposal
- Biosketch: Include both research and education activities and accomplishments
- Supplementary Documents:
 - Departmental Letter – **tremendously important**. Work with your department head on content. Dr. Schulz can assist as well.
 - Letters of Collaboration – limited to a single statement as prescribed in the solicitation:

“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.”



CAREER Budget

- **Minimum** budget: \$500k over 5 years (ENG)
- PIs are **strongly encouraged** to contact their disciplinary program director to discuss CAREER budget requests
- Review recent CAREER awards in your discipline for guidance on average award size
- Salary support is allowed only for CAREER PI. All other allowable costs defined in the GPG are permitted.



NSF GPG Changes

Effective December 26, 2014

- Project Description
 - Must now contain, as a separate section within the narrative, a section labeled “Broader Impacts of the Proposed Work.”
 - Results from Prior NSF Support – publications resulting from the NSF award must provide a complete bibliographic citation for each publication in either this section or the References Cited section.
- Biographical Sketch
 - The location of the of the individual’s undergraduate, graduate and postdoctoral institutions must be provided.
 - Total number of collaborators and co-editors and graduate advisors and postdoctoral sponsors must be identified in the appropriate areas in the “Collaborators & Other Affiliations” section.

Planning: Target & Deadline Dates

Allow plenty of time for preparation and review with program requirements prior to the deadline.

- ERGP Editor: [editor services](#) should be requested at least 5 business days prior to your required return date – keep this in mind if you plan to request editor services.
- Target & deadline dates:
 - Tues, June 9 – commitment to submit (notify Carole/ERGP)
 - Tues, July 8-14 – finalize and upload documents to FastLane
 - Tues, July 15 – final proposal due to PreAwards for review
 - Wed, July 22, 5:00 PM local time – ENG Proposals due in FastLane (CISE proposals due Tues, July 21)



NSF Resources

- [NSF CAREER program website](#)
- [NSF CAREER solicitation, NSF 15-555](#)
- [NSF CAREER FAQs, NSF 15-057](#)
- [NSF GPG, NSF 15-1 and NSF Changes to the GPG \(effective December 26, 2014\)](#)
- [NSF CAREER Program contacts](#)
- [Proposal Preparation Checklist](#)
- [Dear Colleague Letter: FY 2013 Career-Life Balance \(CLB\) Initiative Supplemental Funding Request](#)



Other Resources

- ORSP – [Merit Review Broader Impacts Criterion: Representative Activities, Data Management Plan](#)
- Examples of previous CAREER proposals (see Mary Lou)
- “Write a Successful NSF CAREER-Award Proposal” by Stephen W. Russell (see Mary Lou)
- Research 101 for Engineers by George A. Hazelrigg, NSF Program Manager (see Carole)
- [NSF CAREER Proposal Writing Tips by ZJ Pei](#)