# 2016 NSF Faculty Career Development (CAREER) Program

## Important Documents:

**NSF 15-555:** <http://www.nsf.gov/pubs/2015/nsf15555/nsf15555.htm>

**CAREER FAQ NSF 15-057:** <http://www.nsf.gov/pubs/2015/nsf15057/nsf15057.jsp>

**NSF Grant Proposal Guide 16-1:** <http://www.nsf.gov/pubs/policydocs/pappguide/nsf16001/gpg_index.jsp>

## Deadlines by NSF Directorate:

July 20: BIO, CISE, EHR

July 21: ENG

July 22: GEO, MPS, SBE

## PI Eligibility:

* PI must have a doctoral degree by the submission deadline, hold the title of ASSISTANT PROFESSOR without tenure, and remain in a tenure-track Assistant Professor position until October 1 following the deadline.
* PI may submit only one CAREER proposal per annual competition and 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 Proposals that are not reviewed (i.e. are withdrawn before review or are returned without review) do not count toward the three competition limit.
* PI cannot have already received a CAREER award.

## Fonts and Margins:

* Arial, Courier New or Palatino Linotype at a font size of 10 points or larger; Times New Roman at a font size of 11 points or larger; or Computer Modern family fonts at a font size of 11 points or larger. Smaller fonts may be used for formulae, equations, captions, Greek letters, but the text must still be readable.
* At least 1” margins in all directions; no more than six lines of text per inch.

## Highlights and Suggestions:

* A CAREER Proposal is one of the most prestigious recognitions an early career faculty researcher can receive. It is **not** justaresearch proposal. It **is** a proposal detailing how you will spend your budget to enhance your career development as a researcher and educator. A CAREER Proposal highlights what you uniquely bring to your field and how the proposed work will help your achieve your long-term goals.
* Your career involves a research path (your lifelong research goals), not a research project. Identify milestones toward your goals. Pay attention to the assessment. In particular, NSF emphasizes having a strong Broader Impacts sections as well as well thought out, creative and integrative research and education plans.
* NSF strongly recommends talking with your program officer early, once you have an outline of your CAREER plan.
* Do your homework – complete a thorough literature review for the theoretical and experimental work covered by your proposal
* Seek internal feedback – work with knowledgeable colleagues to review your proposal draft and challenge your ideas.

# CAREER Proposal Preparation and Tips

## Cover Sheet

* Select CAREER program solicitation NSF 15-555
* NSF Unit of Consideration select at least one specific disciplinary program to consider the program.
* Project Title must being with “*CAREER:*” and follow with an informative title.
* No Co-PIs are allowed

***Co-PIs are not permitted.*** *Funds may be requested for others to work on your research or educational activities, but they may not be listed as Co-PI or in the senior personnel section of the proposal – either in the primary or sub award budgets.*

## Project Summary (1 page limit)

* Character limit is 4600 for all three text boxes.
  + Paragraph breaks will add to the character count.
  + Review PDF version to ensure text copied and pasted correctly. Often times paste from word processing software may appear as “?” or other suspicious character.
* May upload as a supplementary document ONLY if [special characters](https://www.fastlane.nsf.gov/d10/SpecialCharactersGuidance.htm) are used (PDF, 1 page limit) and must include separate headings for **Overview**, **Intellectual Merit**, and **Broader Impacts**.

*\*Additional Tips for Writing Your Project Summary are listed below.*

## Project Description (15 page limit)

* Must contain separate section labeled “**Broader Impacts**” \*\*Note\*\* NSF emphasizes having robust broader impacts, and education and outreach sections.
* Should document the need for and nature of collaborations, such as intellectual contributions to the project, permission to access a site, an instrument, or a facility, offer of samples and materials for research, logistical support to the research and education program, or mentoring of US students at a foreign site. Discuss here rather than in the letter of collaboration.
* Include **Results from prior NSF Support** (5 page limit; if applicable)
* URLS must not be used.

*\*Additional Tips for Writing Your Project Description are listed below.*

## References Cited

Each reference must include the name of all authors (in the same sequence in which they appear in the publication).

## PI Biographical Sketch (2 page limit)

* No personal information should be included.
* The location of the individual’s undergraduate, graduate and postdoctoral institution(s) must be provided.
* Appointments should be listed in reverse chronological order.
* Up to 5 most closely related Products (invited lecture may not be included in this section).
* Up to 5 other significant Products (avoid listing multiples of the same activity under 1 heading or giving a description of research interests).
* Up to 5 Synergistic Activities tailored to your CAREER proposal.
* Include **both** research and education activities and accomplishments.

## Current and Pending Support

* All current project support from any source (i.e. Federal, State, local or foreign government agencies, public or private foundations, industrial or other commercial organization, or internal funds allocated toward specific projects) must be listed.
* Detail for “this proposal” must be included.

## Facilities, Equipment and Other Resources

* Descriptions of internal and external resources (both physical and personnel) should be narrative in nature and must not include any quantifiable financial information as this could constitute cost sharing and may result in return of the proposal without review.
* The role and contribution of unfunded collaborators/personnel should be described in this section and documented in a letter of collaboration (see format in supplemental documentation).

## Budget and Justification

## Minimum budget of $400K total costs for the 5 year duration, except:

* Directorate for Biological Sciences (BIO), the Directorate for Engineering (ENG), and the Division of Polar Programs (PLR) have a minimum award size of $500K (5 years).
* ENG budgets should be for $500K EXACTLY.
* PIs are strongly encouraged to contact their disciplinary Program Officer or the appropriate CAREER contact to discuss the budget and typical funding levels for their discipline.
* No support for Senior Personnel except the PI is allowed, either in the primary budget or in any sub awards.
* Requests for Academic Year salary must be well justified and proposers should talk to their Program Officer about their individual cases.
* Consultants and Sub awards are allowed.

Budget Justification (3 page limit)

## Supplemental Documentation

**Departmental Letter** (REQUIRED; 2 pages in length)

* + If a proposer is in two departments, the letter should be signed by the head of the department in which tenure will be granted.
  + Must **not be** a letter of support/recommendation for the PI.
  + Must Include:
  + An indication that the PI's proposed CAREER research and education activities are supported by and integrated into the educational and research goals of the department and the organization, and that the department is committed to the support and professional development of the PI;
  + A description of a) the relationship between the CAREER project, the PI's career goals and job responsibilities, and the goals of his/her department/organization, and b) the ways in which the department head (or equivalent) will ensure the appropriate mentoring of the PI, in the context of the PI's career development and his/her efforts to integrate research and education throughout the period of the award and beyond; and
  + A statement to the effect that the PI is eligible for the CAREER program.

**Letters of Collaboration** - Letters of Support should **NOT** be submitted, as they are not a standard component of an NSF proposal. Letters of Collaboration should followthe **single-sentence format** (departure from this format *may result in the proposal being returned without review*):

“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.”

**Postdoctoral Research Mentoring Plan** (1 page limit, if applicable)

Required for proposals requesting funding to support postdoctoral research.

* Career counseling;
* Training in preparation of grant proposals;
* Publications and presentations;
* Guidance on ways to improve teaching and mentoring skills;
* Guidance on how to effectively collaborate with researchers from diverse backgrounds and disciplinary areas; and
* Training in responsible professional practices.

**Data Management Plan (DMP)** (REQUIRED; 2 page limit): All proposals must describe plans for data management and sharing of products of research, or assert the absence of the need for such plans. In some cases, a NSF directorate may have additional DMP requirements beyond the GPG.

## Single Copy Documents

**Collaborators and Other Affiliations (provide the following):**

* Collaborators and co-Editors. A list of all persons in alphabetical order (including their current organizational affiliations) who are currently, or who have been collaborators or co-authors with the individual on a project, book ,article, report, abstract or paper during the 48 months preceding the submission of the proposal. Also include those individuals who are currently or have been co-editors of a journal, compendium, or conference proceeding during the 24 months preceding the submission of the proposal. If there are no collaborators or co-editors to report, please list none.
* Graduate Advisors and Postdoctoral Sponsors. A list of names of the individual’s own graduate advisor(s) and principal postdoctoral sponsor(s), and their current organization affiliation.
* Thesis Advisor and Postgraduate-Scholar Sponsor. A list of all persons (including their organizational affiliations), with whom the individual has had an association as thesis advisor. In addition, a list of all persons with whom the individual has had an association within the last five years as a postgraduate-scholar sponsor.

**Suggested Reviewers (Optional)**

Proposers may include a list of suggested reviewers (including email address and institutional affiliation) who they believe are especially well qualified to review the proposal. Proposals also may designate persons they would prefer not review the proposal, indicating why.

# Grantsmanship Tips for Writing Your Summary and Description

## Project Summary (recommend using the outline below):

Summary Page Outline:

First paragraph of summary (within first block)

* My long term research goal is...
* In pursuit of this goal, the research objective of this CAREER proposal is...
* The research approach is...

Second paragraph of summary (within first block)

* My long term educational goal is...
* In pursuit of this goal, the educational objective of this CAREER proposal is...
* The educational approach is...

Third paragraph: Intellectual Merit (second block) is the contribution that your research makes to the knowledge base of the field of science or engineering

* What is already known?
* What is new?
* What will your research add?
* What will this do to enhance or enable research in your or other fields?
* Why is your research important for the advancement of your field?

Fourth paragraph: Broader Impact (third block) focuses on the benefit to society at large as a result of your research results

* What is the benefit to society at large as a result of your research? Means to benefit society include: Economic/environment/energy; Education and training; Providing opportunities for underrepresented groups; Improving research and education infrastructure
* The key issue is how your research results will be applied – why would the general public care?

## Project Description (must not exceed 15 pages):

Reviewers want to know four things:

1. What is it about (the research objective)?
2. How will you do it (the technical approach)?
3. Can you do it (you and your facilities)?
4. Is it worth doing (intellectual merit and broader impact)?

The Project Description section should contain a well-argued and specific proposal for activities that will, over a 5 -year period, build a firm foundation for a lifetime of contributions to research and education in the context of the PI's organization.

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 (5 page limit), if applicable.