Faculty Early Career Development (CAREER) Program
Program Solicitation – NSF 14-532

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Members of the CAREER Coordinating Committee

http://www.nsf.gov/career

Support for New Investigators

• All NSF programs support new investigators as part of the regular (“core”) research competitions.

• About 2/3 of new investigators are supported by the “core” research programs.

• Faculty Early-Career Development (CAREER) Program
  – Most prestigious awards to help a junior faculty member develop activities that can effectively integrate research and education within the context of his/her organization.
Goals of the CAREER Program

• Provide stable support for five years (≥ $400K in most Directorates – ENG, BIO and GEO/PLR are ≥ $500K) to allow the career development of outstanding new teacher-scholars in the context of the mission of their organization.

• 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.

• Increase participation of those traditionally underrepresented in science and engineering.

CAREER is NSF wide

• The program started in 1996
• All Directorates/Offices participate in the program
• Proposals are submitted to program of interest
• More than 9,000 CAREER awards have been made over the years
• NSF Presidential Early-Career Awards in Science and Engineering (PECASE) are selected out of the pool of recent CAREER awardees
Investigator Eligibility Criteria

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

Institutional Eligibility

• Academic institutions in the U.S., its territories or possessions, and the Commonwealth of Puerto Rico that award degrees in fields supported by NSF.
• Non-profit, non-degree-granting organizations such as museums, observatories or research labs may also be eligible to submit proposals, if the eligibility requirements of the PI's position are satisfied
• NSF encourages proposals from different institutional types, including Minority Serving and Undergraduate Institutions
CAREER varies across NSF

- Number of submitted CAREER proposals vary widely across NSF
- Review and Funding methods vary according to Directorate and Division practices
- Many CAREER proposals compete with other research proposals in the most appropriate research program
- CAREER Coordinating Committee is made up of members from the different Directorates/Offices – We are the liaison between the programs and the senior management at NSF
Merit Review of CAREERs

- Ad hoc + Panel (with other proposals in the Program – most of GEO (AGS uses ad hoc only), BIO, and SBE
- Mostly dedicated CAREER Panels – ENG, CISE, EHR, MPS varies by Division:
  - AST – Panel only
  - CHE, DMR – Mix of ad hoc and panels (check your program)
  - DMS – mostly panels (2 programs use ad hoc only)

Success Rates and Expectations

- CAREER proposals are submitted to a disciplinary unit or program
- They are reviewed according to the relevant Program guidelines - Talk to Program Officer or Division Contact for more information (http://www.nsf.gov/crssprgm/career/contacts.jsp)
- Make sure to check on typical award sizes in your program
- Ask about expectations for scope of research and education plans
- Assessment of Departmental Letter (2 pages) is part of the review criteria for CAREER
- Funding rates follows trend for regular proposals in the program of interest
Is CAREER the right program for you?

• Can you think of a proposal that is appropriate for NSF with research and education activities that are innovative and ambitious?
• Is your Department/Organization supportive?
• Are you seriously committed to the goals of CAREER?
• Are you at the right stage in your career?
• Would you like to be considered for the Presidential Early Career Awards for Scientists and Engineers (PECASE), if eligible?
• Have you discussed your ideas with mentors, fellows, program officers?

What should be in a CAREER proposal?

• A compelling research plan
• Innovative but doable education plan
• A plan for the effective integration of both sets of activities (evaluation plan is a big plus)

Education activities – curriculum, pedagogy, outreach, mentoring at any level, majors and non-majors, teacher preparation or enhancement, K-12 students, and/or the general public.
**CAREER Education Plan**

- Activities should go beyond what is expected from any Assistant Professor in your field
- Workload should not be unreasonable
- Should be informed by what has been successful in the past - intellectual merit of the education component
- Should have a plan for assessing the success of the education program
- Check with your Program Officer or search the abstracts on the web

**Integration of Research and Education**

How will your research impact your education goals and how will your education activities feed back into your research?

- Involving others (graduate, undergraduates, K-12, high school teachers, public) in your research using new tools, laboratory methods, field components, web outreach, cyber networks, etc...
- Partnering with those in other communities, especially those traditionally underrepresented in Sciences and Engineering
- Bringing the excitement of your research topics to help in the education of others
- Searching for new methods to deliver your research results to a broader audience than those in the immediate research community
- Using the broader community to gather data for your scientific pursuits (“citizen science”)
CAREER personnel and budgets

- No co-principal investigators or other senior personnel are allowed
- Consultants, sub-awards are allowed (but no senior personnel costs in sub-awards)
- Some programs will support buy out of academic year time for teaching intensive institutions (check with your Program Officer)
- International activities are encouraged and may be supported by the Office of International Science and Engineering (OISE)
- Some Directorates prefer making more awards but closer to the 400K minimum (or 500K in BIO and OPP).

Departmental Letter (2 pages)

- Support for the PIs proposed CAREER research and education activities
- Description of how the PIs career goals and responsibilities mesh with that of the organization and department
- Commitment to the professional development of the PI with mentoring and whatever is needed to forward the PIs efforts to integrate research and education
- Statement that indicates the PI is eligible for the CAREER program
- Should not serve as a letter of recommendation or endorsement of the PI or the research project
Traits of Successful CAREER proposals

- CAREER proposals should match the expectations in the disciplinary programs in terms of research and education - This is a highly competitive program!
- Written with peer reviewers (Ad Hoc and/or Panel) in mind - Ask your Program Officer who will be assessing your proposal
- Appropriate scope of education and research activities. It is a 5-year plan, not your whole life
- Goes outside the ‘education box’ of regular research proposals in your field
- Strikes a balance between doable research activities and more risky pursuits

CAREER Urban Myths

- “You cannot apply because you have another award from NSF”
- “It is an entry program, so apply to CAREER first”
- “I need to see a successful proposal to write a successful proposal”
- “I read on the web that to succeed, I have to....”
- “CAREER proposals are more portable”
- “The education component does not matter”
- “You have no chance, if you are not from a research-intensive institution”
PECASE: Presidential Early-Career Awards for Science and Engineers

- **PECASE Eligibility** - Be a US Citizen or US Permanent Resident by the time of nomination to the White House’s Office of Science and Technology Policy
- 20 Nominees for NSF PECASE every year from the pool of recent CAREER awardees
- Number of nominees from each Directorate is a function of the number of proposals submitted to the programs in the Directorate

The CAREER website – www.nsf.gov/career

- Latest Program Solicitation - NSF 14-532
- Frequently Asked Questions - NSF 11-038
- CAREER Directorate/Division Contacts
- Link to recent awards
- Link to PECASE awards
- Deadlines for the current solicitation
  - July 21, 2014 - BIO, CISE, EHR, OCI
  - July 22, 2014 - ENG
  - July 23, 2014 - GEO, MPS, SBE, OPP
PECASE: Presidential Early-Career Awards for Science and Engineers (Dec. 2010)