

**Faculty Early Career Development
(CAREER) Program**

Program Solicitation – NSF 11-690



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<http://www.nsf.gov/career>

Support for New Investigators

- All NSF programs support new investigators as part of the regular research competitions.
- About 2/3rds of new investigators are supported by the research programs.
- In 2011, only 67% of CAREER applicants were New Pis at NSF.
- 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.



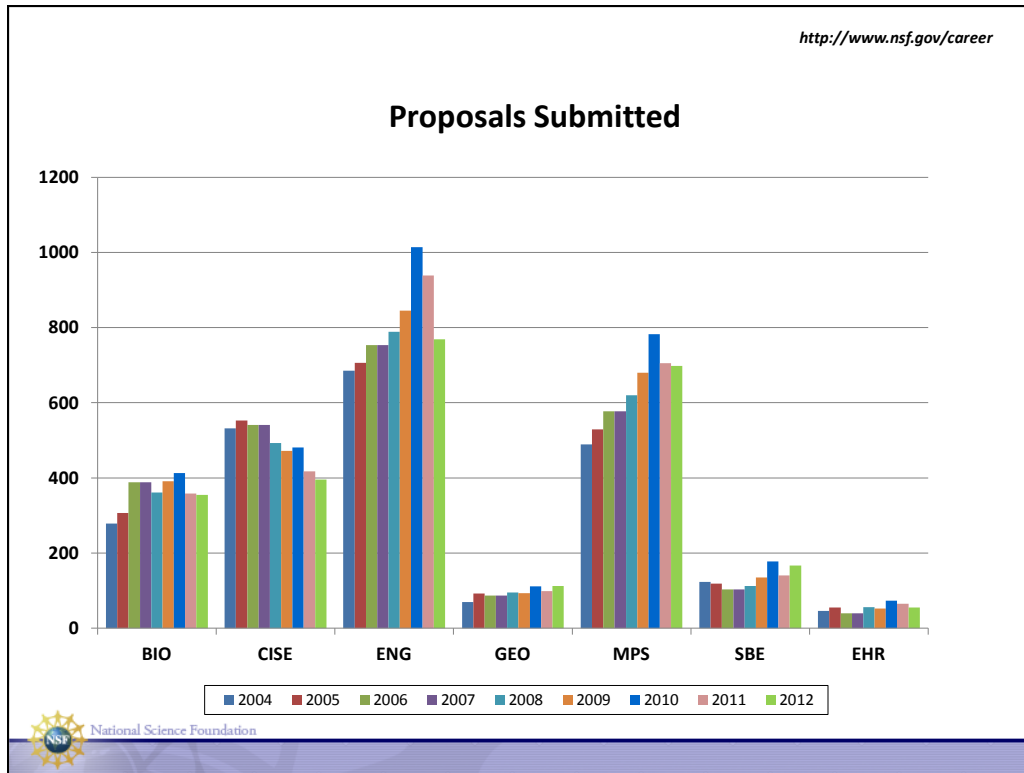
Goals of the CAREER Program

- Provide stable support for five years ($\geq 400K$ in most Directorates, BIO and OPP are $\geq 500K$) 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 varies across NSF

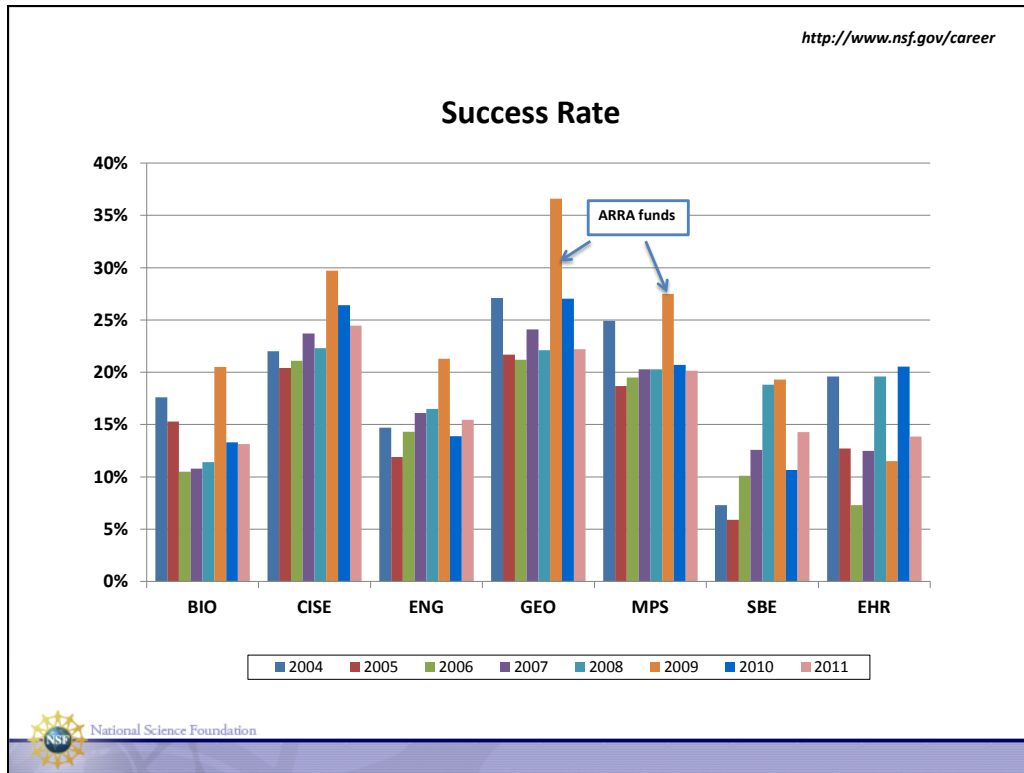
- **Number of submitted CAREER proposals vary widely across NSF**
- **Review and Funding methods vary according to Directorate and Division practices**
- **Many CAREER proposals compete with other research proposals in the most appropriate research program**
- **CAREER Coordinating Committee is made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





Success Rates and Expectations

- CAREER proposals are submitted to a disciplinary unit or program
- They are reviewed according to the relevant Program/Division practices - Talk to Program Officer or Division Contact for more information
(<http://www.nsf.gov/crssprgm/career/contacts.jsp>)
- Typical award sizes vary in each Program and/or Division
- Variable levels of 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



Merit Review of CAREERs

- Ad hoc + Panel (with other proposals in the Program – most of GEO (ATM uses ad hoc only), BIO, and SBE
- Mostly dedicated CAREER Panels – ENG, CISE, EHR, OCI
- 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)



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 staff are allowed**
- **Consultants, sub-awards are allowed (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 400 K 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
- Verification that the PI is eligible for the CAREER program

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 that will help establish a successful career path in both research and education
- Goes outside the education box of regular research proposals in your field
- Strikes a balance between doable research activities and more risky pursuits



National Science Foundation

Some CAREER Urban Myths

- You cannot apply if you have another award
- It is an entry program, apply to CAREER first
- I can only write a good CAREER proposal after I have seen successful CAREER proposals
- I read on the web that to succeed you have to...
- CAREER awardees are more “mobile”
- The education component does not matter
- You have no chance if you are not from a research-intensive institution

<http://www.nsf.gov/career>

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 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?



National Science Foundation

<http://www.nsf.gov/career>

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 per Directorate is a function of the number of proposals submitted to the program for each Directorate**



The CAREER website – www.nsf.gov/career

- **Latest Program Solicitation - NSF 11-690**
- **Frequently Asked Questions - NSF 11-038**
- **CAREER Directorate/Division Contacts**
- **Link to recent awards**
- **Link to PECASE awards**
- **Next Deadlines**
 - July 23, 2012 - BIO, CISE, EHR, OCI
 - July 24, 2012 - ENG
 - July 25, 2012 - GEO, MPS, SBE, OPP



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PECASE: Presidential Early-Career Awards for Science and Engineers (Dec. 2010)

