

Faculty Early Career Development (CAREER) Program

Program Solicitation NSF 08-557



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

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Support for New Investigators

- All NSF programs support new investigators as part of the regular (“core”) research competitions.
- About 2/3rds of new investigators are supported by the “core” programs.
- Some Directorates have special programs for new investigators (e.g., BIO Research Initiation Awards, BRIGE-Broadening Participation Initiation Grants in Engineering)
- 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.



National Science Foundation

Goals of the CAREER Program (Program Solicitation NSF 08-557)

- **Provide stable support for five years ($\geq 400K$ in most Directorates, BIO is $\geq 500K$) 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.**
- **Increase participation of those traditionally underrepresented in science and engineering.**
- **Provide incentives to Universities to value the integration of research and education.**



CAREER is NSF wide

- **The program is more than 14 years old**
- **All Directorates/Offices participate in the program**
- **More than 200 Programs across NSF have reviewed CAREER proposals**
- **More than 5,000 CAREER awards have been made over the years**
- **~ 220 NSF Presidential Early-Career Awards in Science and Engineering (PECASE) have been awarded out of the pool of CAREER awardees**



Investigator Eligibility Criteria

- Hold a doctoral degree in a field supported by NSF by proposal deadline
- Be untenured by Oct 1st following proposal deadline
- Be employed in a tenure-track (or equivalent) position at an eligible institution as an Assistant Professor (by 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 Community College, Minority Serving and Undergraduate Institutions

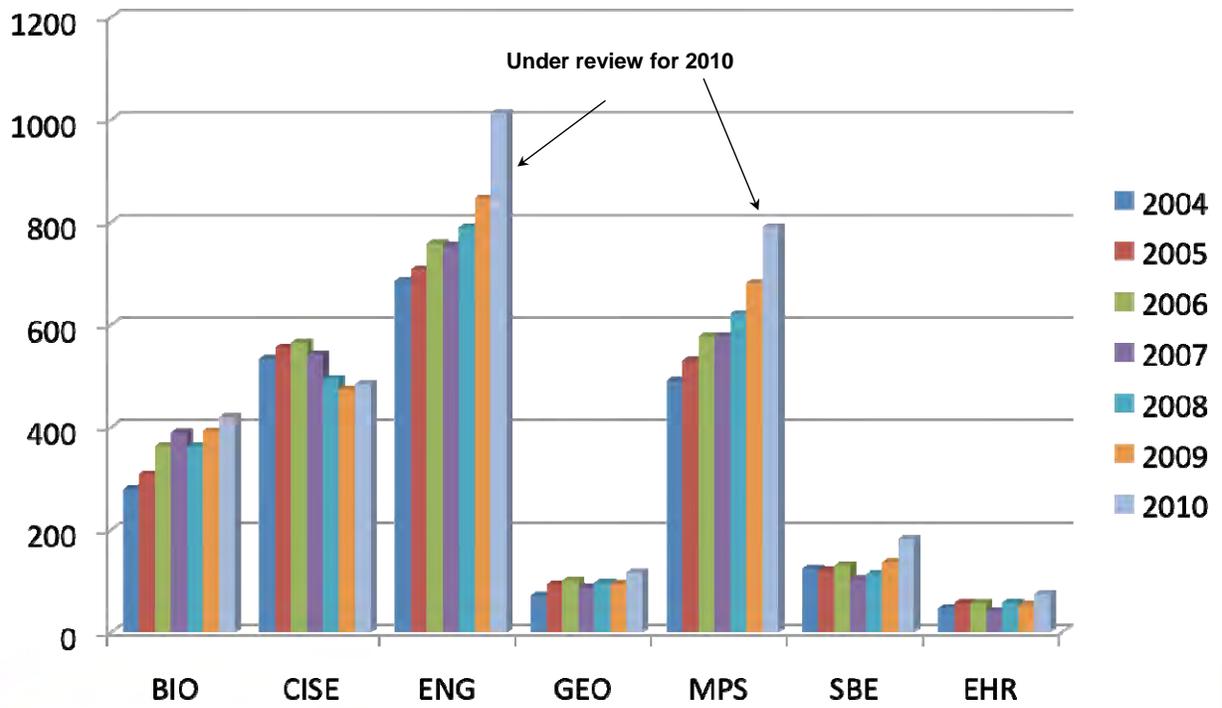


CAREER varies across NSF

- **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 members serve as liaison between the programs and the Directorate (see their names in the CAREER website)**



Proposals Submitted



Merit Review of CAREERS

- Ad hoc + Panel (with other proposals in the Program – most of GEO (ATM uses ad hoc only), BIO, 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)

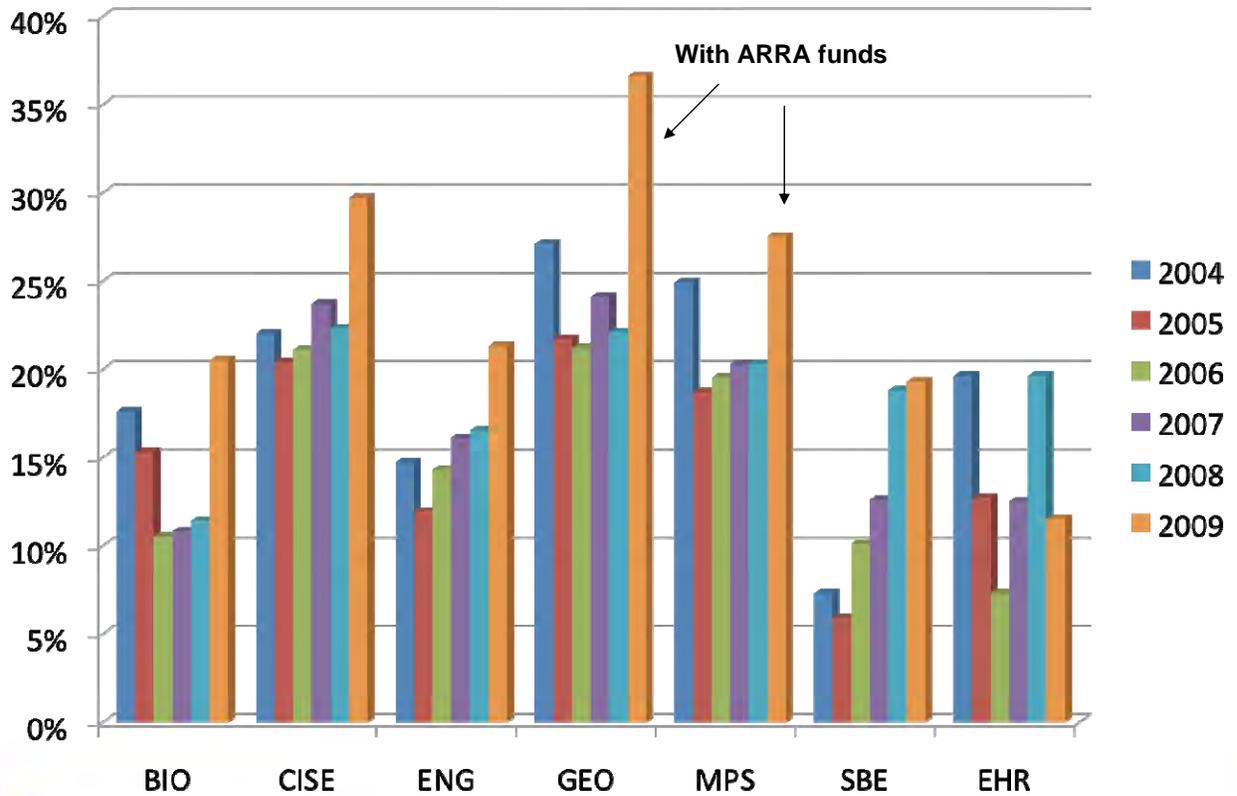


Success Rates and Expectations

- 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 endorsement letter is part of the review criteria for CAREER
- Funding rates follows trend for regular proposals in the program of interest



Success Rate



Is CAREER the right program for you?

- Is your Department/Organization supportive?
- Are you seriously committed to the goals of CAREER?
- Need long term independence to develop your activities in research and education?
- 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?



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 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**



What is Integration of Education and 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.**



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 at the 400 K minimum (or 500K in BIO).**



Letter from the Chair

- **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 often need to match the expectations in the disciplinary programs - This is a highly competitive program!
- Written with peer reviewers (Ad Hoc and 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
- Strike a balance between doable research activities and more risky pursuits



PECASE: Presidential Early-Career Awards for Science and Engineers

- **PECASE Eligibility** - Be a US Citizen or US Permanent Resident by the application deadline (currently more than 30% of applicants are not eligible)
- 20 Nominees for NSF PECASE every year from the pool of CAREER awardees
- Number of nominees per Directorate are based on number of PECASE-eligible proposals submitted that year



Website - <http://www.nsf.gov/career> Frequently-Asked Questions - NSF 08-051



The screenshot shows the NSF website interface. At the top left is the NSF logo with the tagline "WHERE DISCOVERIES BEGIN". To the right is a search box labeled "SEARCH" with a dropdown menu set to "NSF Web Site" and a search button. Below the logo is a navigation bar with links: HOME | FUNDING | AWARDS | DISCOVERIES | NEWS | PUBLICATIONS | STATISTICS | ABOUT | FastLane. The main content area features a "Publications" sidebar on the left with links like "Search/Browse Publications" and "Obtaining Publications". The main content area displays the title "FAQs About the Faculty Early Career Development (CAREER) Program" in bold. Below the title, it lists available formats (HTML, PDF, TXT), document type (Program Announcements & Information), and document number (nsf08051). A public comment link "NSF 08-557" is also present. The document history indicates it was posted on June 2, 2008. A note at the bottom of the main content area refers to a "Plug-ins and Viewers" page for more information on file formats. At the bottom of the page, there is a "Print this page" button and a "Top" button.

CAREER Due Dates (2010)

- **July 20, 2010**
 - BIO, CISE, EHR (+ OCI)
- **July 21, 2010**
 - ENG
- **July 22, 2010**
 - GEO, MPS, SBE and OPP

