

Faculty Early Career Development (CAREER) Program

Program Solicitation NSF 08-557



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

Support for New Investigators

- All NSF programs support new investigators as part of the regular (“core”) research competitions.
- About 2/3rds 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.



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

- Provide stable support for five years ($\geq 400\text{K}$ in most Directorates, BIO is $\geq 500\text{K}$) 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 over the years**
- **More than 5,000 CAREER awards have been made over the years**
- **~ 240 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**

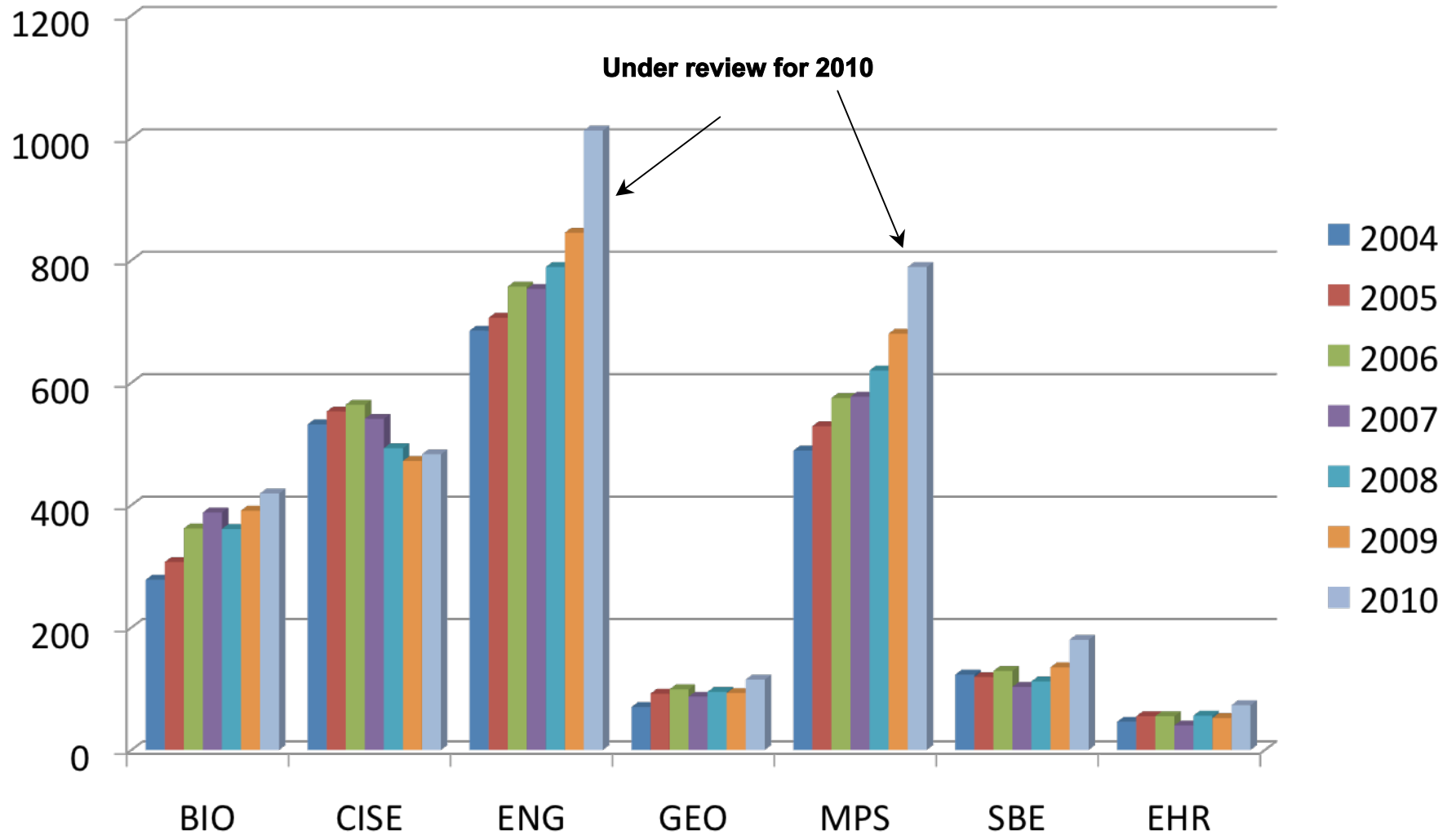


CAREER varies across NSF

- **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, 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)



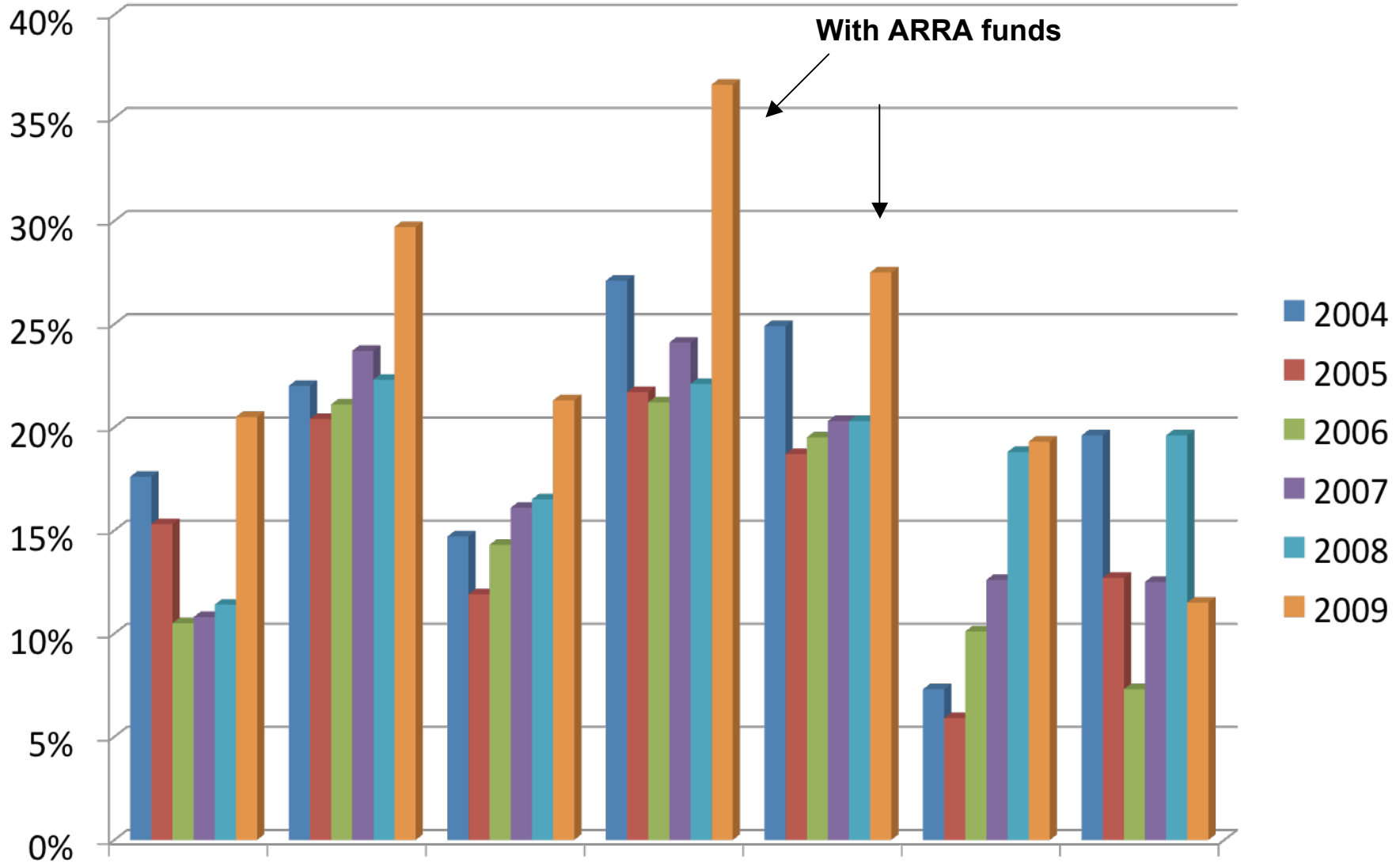
Success Rates and Expectations

- 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

With ARRA funds



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 is titled "Publications" and features a sidebar on the left with links: Publications, Search/Browse Publications, Obtaining Publications, Related, and Use of NSF Logos. The main content area displays the title "FAQs About the Faculty Early Career Development (CAREER) Program" with a horizontal line underneath. Below the title, it lists available formats: [HTML](#) | [PDF](#) | [TXT](#), document type: "Program Announcements & Information", and document number: "nsf08051". It also includes a "Public Comment" section with the text "CAREER program solicitation: [NSF 08-557](#)" and a "Document History" section stating "Posted: June 2, 2008." At the bottom of the main content area, there is a link to "For more information about file formats used on the NSF site, please see the [Plug-ins and Viewers](#) page." and a "Print this page" button. A "Top" button is located in the bottom right corner of the main content area.

CAREER Due Dates (2010)

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

