

Faculty Early Career Development (CAREER) Program



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

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Please check CAREER website for the next Program solicitation - will come out early next year

The screenshot shows the NSF CAREER website. At the top is the NSF logo and the text "National Science Foundation WHERE DISCOVERIES BEGIN". A search bar is located in the top right corner. Below the header is a navigation menu with links for HOME, FUNDING, AWARDS, DISCOVERIES, NEWS, PUBLICATIONS, STATISTICS, ABOUT, and FastLane. The main content area is titled "Faculty Early Career Development (CAREER) Program" and includes sections for "Crosscutting/NSF-wide", "CAREER and PECASE Information", "FAQs About the Faculty Early Career Development (CAREER) Program (NSF08051)", "PECASE Press Releases, Photos and Award Lists", "CONTACTS", "PROGRAM GUIDELINES", and "SYNOPSIS". A sidebar on the left contains links for "Funding", "Proposals and Awards", and "Related" information. The "SYNOPSIS" section provides a detailed description of the CAREER program and its goals.

Funding

- Find Funding
- A-Z Index of Funding Opportunities
- Recent Funding Opportunities
- Upcoming Due Dates
- Advanced Funding Search
- Interdisciplinary Research
- How to Prepare Your Proposal
- About Funding

Proposals and Awards

- Proposal and Award Policies and Procedures Guide
- Introduction
- Proposal Preparation and Submission
 - Grant Proposal Guide
 - Grants.gov Application Guide
- Award and Administration
 - Award and Administration Guide
- Award Conditions
- Other Types of Proposals
- Merit Review
- NSF Outreach
- Policy Office

Related

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Crosscutting/NSF-wide

Faculty Early Career Development (CAREER) Program

CAREER and PECASE Information

- [FAQs About the Faculty Early Career Development \(CAREER\) Program \(NSF08051\)](#)
- [PECASE Press Releases, Photos and Award Lists](#)

CONTACTS

Division CAREER contacts are listed on the CAREER web page at: <http://www.nsf.gov/crssprgm/career/contacts.jsp>

PROGRAM GUIDELINES

Solicitation [08-557](#)

Please be advised that the NSF Proposal & Award Policies & Procedures Guide (PAPPG) includes guidelines implementing the mentoring provisions of the America COMPETES Act (ACA) (Pub. L. No. 110-69, Aug. 9, 2007.) As specified in the ACA, each proposal that requests funding to support postdoctoral researchers must include a description of the mentoring activities that will be provided for such individuals. Proposals that do not comply with this requirement will be returned without review (see the PAPP Guide Part I: Grant Proposal Guide Chapter II for further information about the implementation of this requirement).

SYNOPSIS

CAREER: The Faculty Early Career Development (CAREER) Program is a Foundation-wide activity that offers the National Science Foundation's most prestigious awards in support of junior faculty who exemplify the role of teacher-scholars through outstanding research, excellent education and the integration of education and research within the context of the mission of their organizations. Such activities should build a firm foundation for a lifetime of leadership in integrating education and research. NSF encourages submission of CAREER proposals from junior faculty members at all CAREER-eligible organizations and especially encourages women, members of underrepresented minority groups, and persons with disabilities to apply.

PECASE: Each year NSF selects nominees for the Presidential Early Career Awards for Scientists and Engineers (PECASE) from among the most meritorious new CAREER awardees. Selection for this award is based on two important criteria: 1) innovative research at the frontiers of science and technology that is relevant to the mission of the sponsoring organization or agency, and 2) community service demonstrated through scientific leadership, education or community outreach. These awards foster innovative developments in science and technology, increase awareness of careers in science and engineering, give recognition to the scientific missions of the participating agencies, enhance connections between fundamental research and national goals, and highlight the importance of science and technology for the Nation's future. Individuals cannot apply for PECASE. These awards are initiated by the participating federal agencies. At NSF, up to twenty nominees for this award are selected each year from among the PECASE-eligible



National Science Foundation

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” research programs.
- Some Directorates have special programs for new investigators with attention to broadening participation (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 (Old 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 15 years old**
- **All Directorates/Offices participate in the program**
- **More than 200 Programs across NSF have reviewed CAREER proposals over the years**
- **More than 7,000 CAREER awards have been made over the years**
- **~ 300 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**

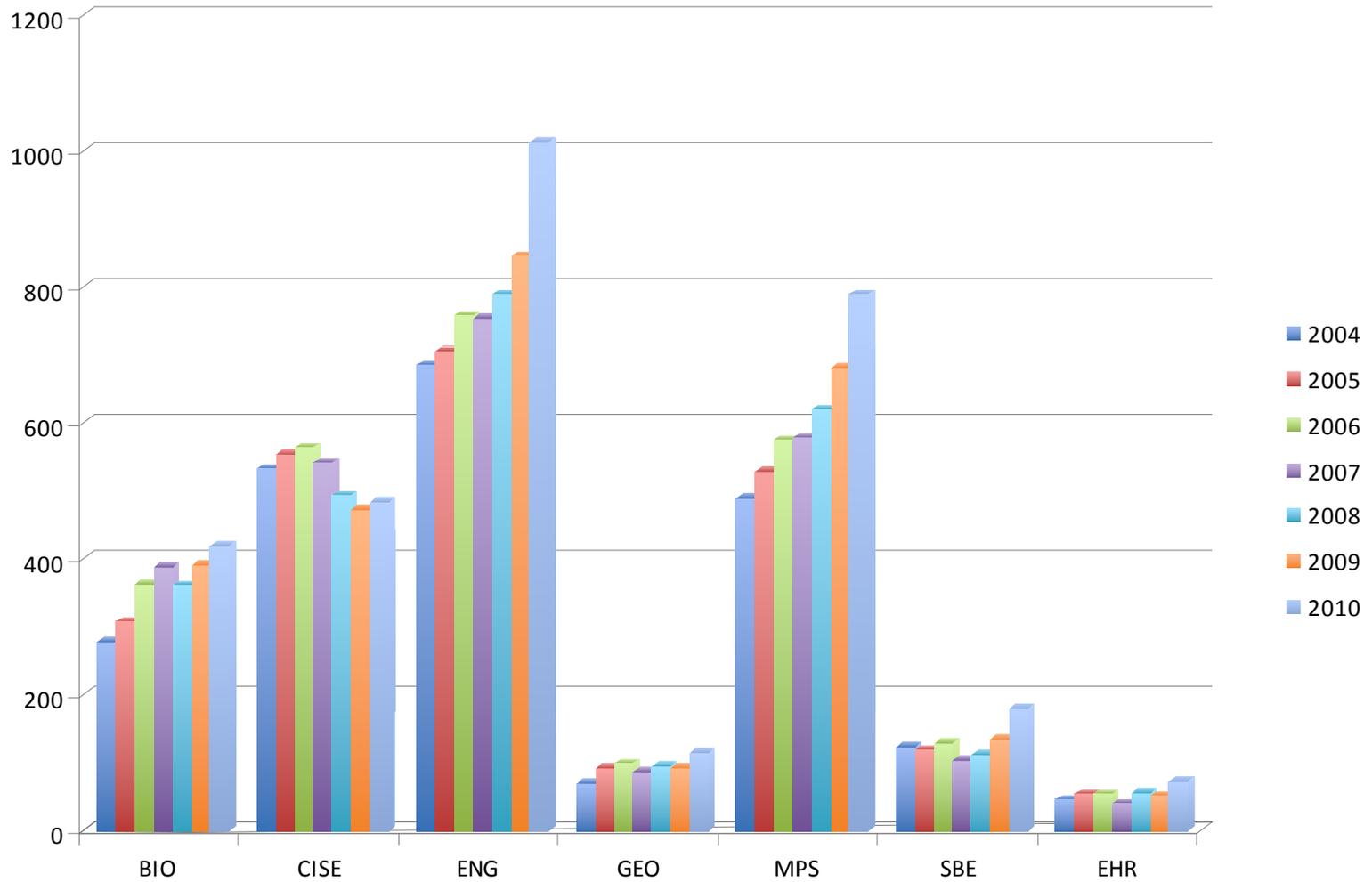


CAREER varies across NSF

- **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

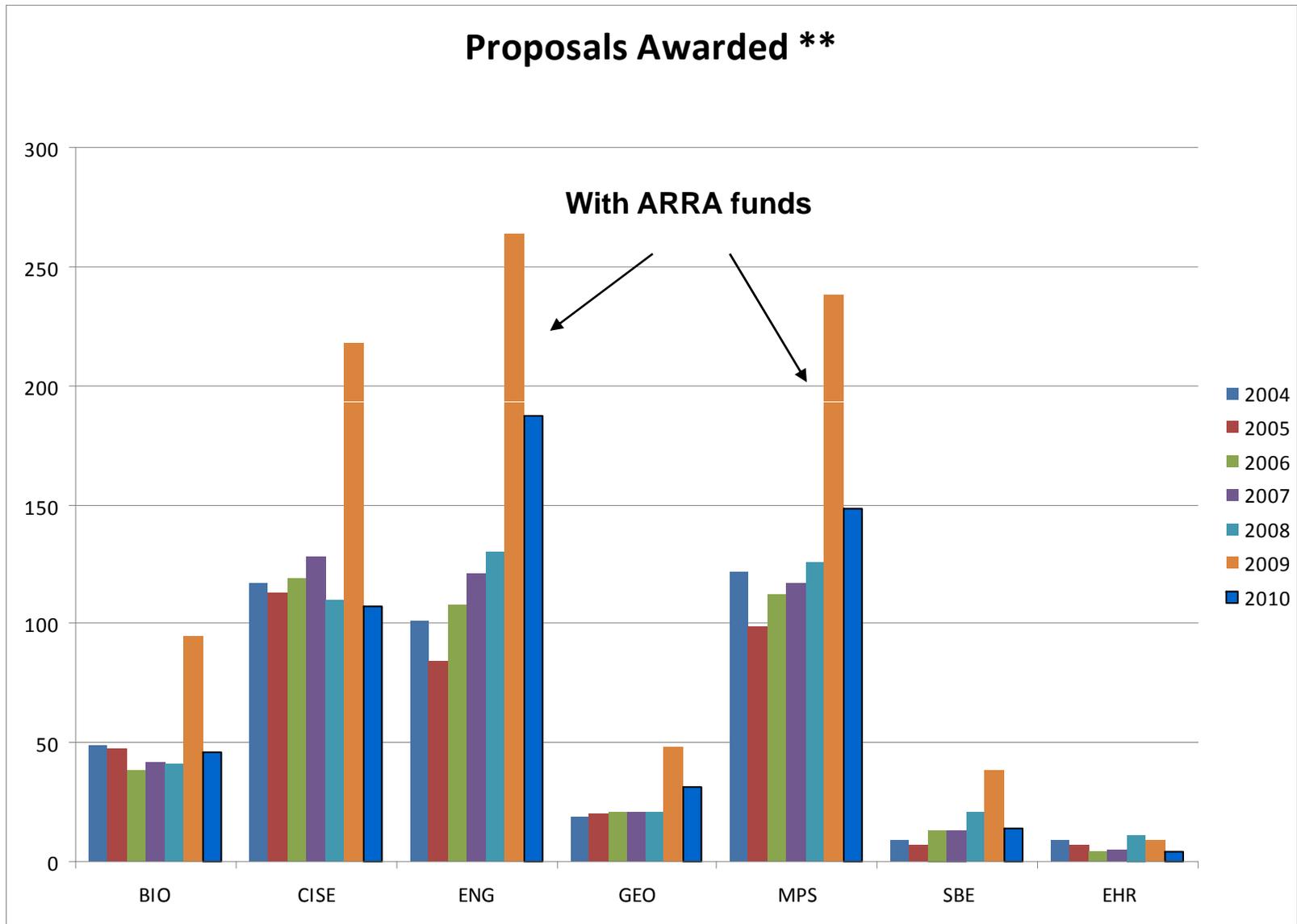
- Ad hoc + Panel (with other proposals in the Program – most of GEO (ATM uses ad hoc only), BIO, and SBE)
- Mostly dedicated CAREER Panels – ENG, CISE, EHR, OCI
- MPS varies by Division:
 - AST – Panel only
 - CHE, DMR – Mix of ad hoc and panels (check your program)
 - DMS – mostly panels (2 programs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





** Some additional awards are still possible in 2010



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?**



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**



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**

