Faculty Early Career Development (CAREER) Program

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http://www.nsf.gov/career
Please check CAREER website for the next Program solicitation - will come out early next year.
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 (≥400K in most Directorates, BIO is ≥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

BIO  CISE  ENG  GEO  MPS  SBE  EHR

http://www.nsf.gov/career
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
Proposals Awarded **

With ARRA funds

** 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