Faculty Early Career Development (CAREER) Program

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http://www.nsf.gov/career

CAREER Program Website

www.nsf.gov/career

NSF-wide

Faculty Early Career Development Program (CAREER)

CAREER and PECASE Information

Presentation slides from May 26, 2015 NSF CAREER Program Webinar

Frequently Asked Questions (FAQ) about the Faculty Early Career Development (CAREER) Program for Submission in Years 2015 and 2016 (NSF 15-057)

PECASE Press Releases, Photos and Award Lists

PECASE Recipients

CONTACTS

CAREER Directorate and Division Contacts:
http://www.nsf.gov/crssprgm/career/contacts.jsp

PROGRAM GUIDELINES

Solicitation 15-555

Important Information for Proposers

A revised version of the *NSF Proposal & Award Policies & Procedures Guide* (PAPPG) (NSF 15-1), is effective for proposals submitted, or due, on or after December 26, 2014. The PAPPG is consistent with, and, implements the new Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (Uniform Guidance) (2 CFR § 200). Please be advised that the guidelines contained in NSF 15-1 apply to proposals submitted in response to this funding opportunity.

DUE DATES

Full Proposal Deadline Date: July 20, 2016
BIO, CISE, EHR

Full Proposal Deadline Date: July 21, 2016
ENG

Full Proposal Deadline Date: July 22, 2016
GEO, MPS, SBE

New Solicitation being prepared for clearance by the end of the year

Deadlines expected to be in third week of July

Support for New Investigators

- All NSF programs support new investigators as part of regular ("core") research competitions
- About 1/3 of proposals submitted to NSF in 2016 were by new investigators (never funded by NSF)
- Success rate of new investigators typically lag behind those of previously funded PIs
- 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 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.

Investigator Eligibility Criteria

- Hold a doctoral degree in a field supported by NSF by proposal deadline
- Be employed in a tenure-track (or tenure-track equivalent) position at an eligible institution by Oct 1st following deadline
- Have educational responsibilities at the eligible institution
- Have not previously received a CAREER award
- Have not had more than two CAREER proposals reviewed

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 different institutional types, including Minority Serving and Undergraduate Institutions

CAREER or Regular proposal?

- CAREER proposals are single PI projects that include research and education activities that are integrated, innovative and ambitious
- CAREER requires support from the Department Chair
- The CAREER goals are lofty – CAREER awards are a lot of work
- Are you at the right stage in your career to undertake the commitments of a CAREER award?
- Have you discussed your ideas with mentors, fellows, program officers?
- Have you demonstrated to others in the community that you have the commitment to both research and education?

CAREER varies across NSF

(Program Expectations)

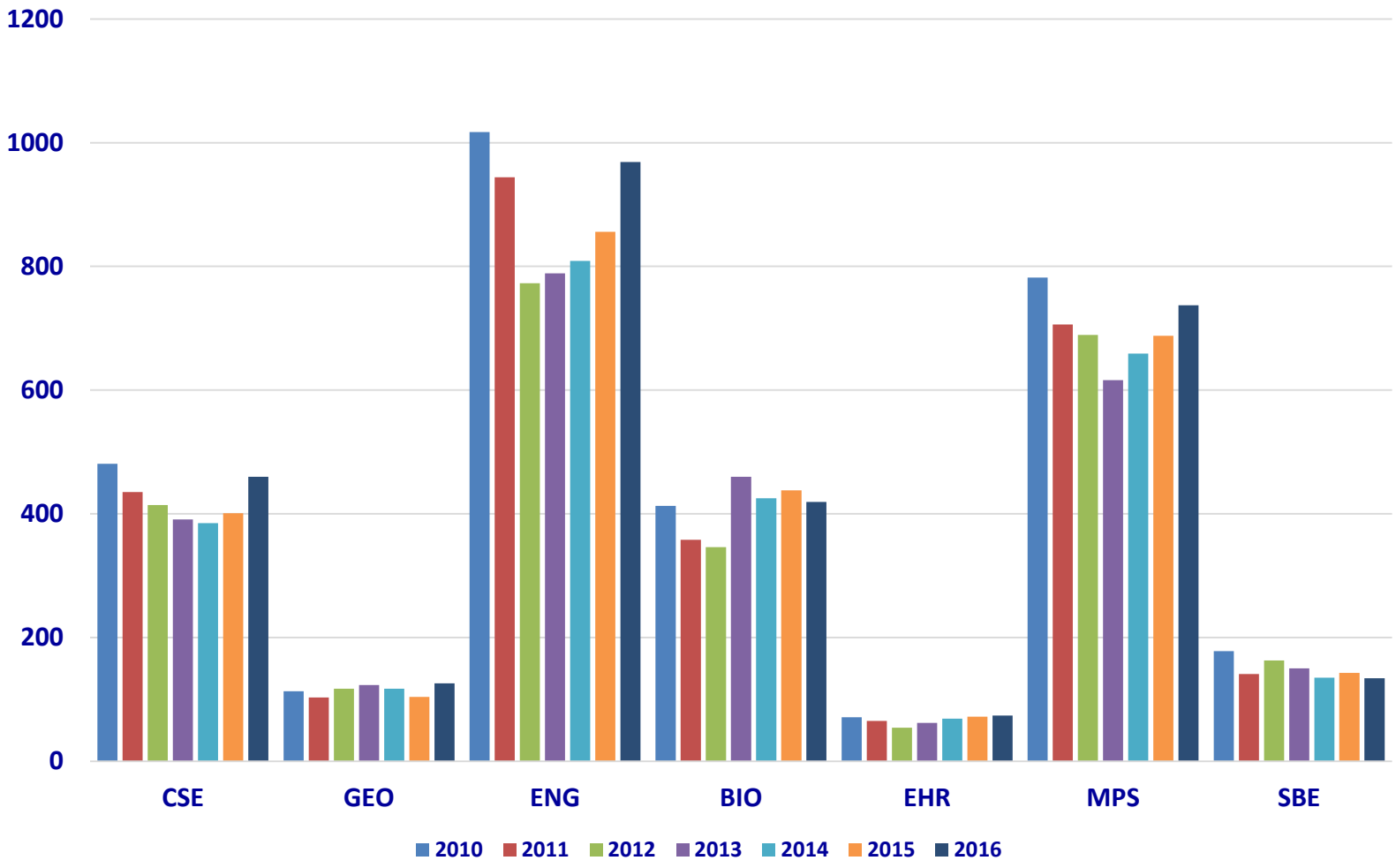
- CAREER proposals are submitted to, and reviewed by one or more of the disciplinary research programs
- Assessment of Departmental Letter plays a role in the review of the proposal
- Typical award size vary by Directorate/Division/Program
- Expectations for scope of research and education activities varies with community norms
- Talk to Division Contact(s) for additional information *(http://www.nsf.gov/crssprgm/career/contacts.jsp)*
- For interdisciplinary proposals, contact all relevant Program Directors or Division Contacts

CAREER varies across NSF

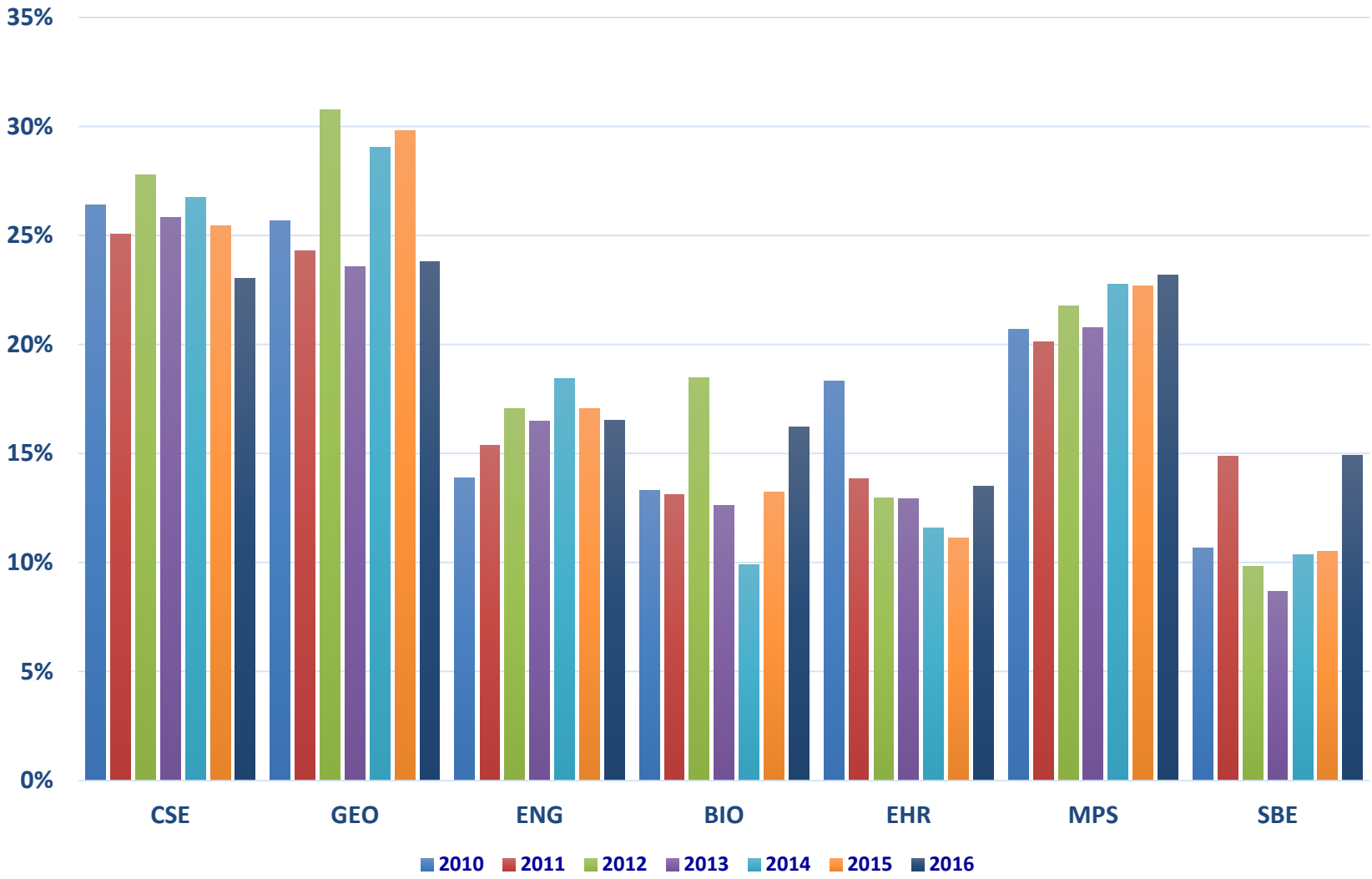
(Merit Review)

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

Number of CAREER proposals



CAREER Funding Rate



CAREER Proposal Ingredients

- A compelling research plan
- An innovative but feasible education plan
- A plan for the effective integration of both sets of activities (evaluation plan is a big plus)
- Departmental Letter demonstrating commitment to the career development of the investigator
- Letters of Collaboration (not of support) when appropriate
- A budget that is consistent with the scope of the research and education activities

Education Component - Critical to Success!

- Your education component should be innovative but doable
- Demonstration of previous results with successful education activities is a plus
- Leverage activities at your institution that have relevance to your research
- Make sure that the education activities are well integrated with the research or the workload will not be manageable
- State who will benefit from the proposed activities
- Demonstrate that the activities are having impact on the stakeholders
- Play on your strengths as a teacher-scholar

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")**

Departmental Letter (2 pages)

- Commitment to the PI's proposed CAREER research and education activities
- Description of how the PIs career goals and responsibilities mesh with that of the organization and department
- Description of how the department will contribute to the professional development of the PI with mentoring and whatever is needed to forward the PIs efforts to integrate research and education
- Statement that indicates how the PI is eligible for the CAREER program

Letter(s) of Collaboration

- **Project Description or Facilities, Equipment and Other Resources** must document the nature of all project collaborations, such as:
  - **Intellectual contributions to the project**
  - **Permission to access a site, use instrumentation or facility**
  - **Offer to furnish samples / materials for research**
  - **Logistical support / evaluation services**
  - **Mentoring of U.S. students at a foreign site**
- Letter should contain a single-sentence statement of collaboration:
  - **"If the proposal submitted by Dr. [name of the PI] entitled [proposal title] is selected for funding by the NSF, it is my intent to collaborate and/or commit resources as detailed in the Project Description."**
  - **Must not recommend or endorse PI or project**

CAREER personnel and budgets

- Co-PIs are not allowed
- Consultants, sub-awards, and other personnel are allowed
- International activities are encouraged and may be supported by the Office of International Science and Engineering (OISE)
- Programs may support buy out of academic year time for teaching intensive institutions (check with your Program Officer)
- Some programs may choose making more awards at lower total budgets (check with your Program Officer)

Most Common Mistakes made by PIs (IM)

- Work is too close to what has been done before - i.e., Incremental advance
- Techniques and methodology are not cutting edge
- Project has too large a scope or is too narrowly focused to be exciting
- Proposed methods/research plan are not likely to yield results that will address the stated goals of the project
- The experiment/theoretical/analytical design is flawed
- Resources not available or PI does not have demonstrated expertise in it

Most Common Mistakes made by PIs (BI)

- **Education component is generic and what is expected of any PI in your field - one more student is not enough!**
- **Unrealistic education activity - "will impact K-12 education in the state of X"**
- **Reinventing the wheel - another blog, another website**
- **Research and education plans are not aligned or integrated – *"parallel lines that will never intersect"***
- **Lack of understanding of what is effective in education - literature search helps here too**
- **Not highlighting Broader Impacts that go beyond education**

PECASE (Presidential Early Career Award in Science and Engineering)

- 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
- Several federal agencies nominate individuals for the PECASE (over 100 nominees in total)
- 20 nominees are put forward from NSF each year selected from recent CAREER awardees
- Number of nominees per Directorate is based on number of awards made in the Directorate

PECASE (Presidential Early Career Award in Science and Engineering)

Official White House Photo by Lawrence Jackson – May 2016

QUESTIONS ?