

NSF

Federal Funding Opportunities for Teaching, Research and Outreach for HSI

José L. Muñoz

CTO

HACU National Conference 2014

5Oct14



Outline

- Graduate Research Fellowship Program (GRFP)
- Research Experiences for Undergraduates (REU)
- NSF Research Traineeship (NRT)
- CAREER
- Int'l Research Experiences for Students (IRES)



Graduate Research Fellowship Program (GRFP)

- To select, recognize, and financially support individuals early in their careers with the demonstrated potential to be high achieving scientists and engineers
- To broaden participation in science and engineering of underrepresented groups, including women, minorities, persons with disabilities, and veterans



GRFP Eligibility

- U.S. citizens and permanent residents
- Early-career graduate students
- Pursuing research-based MS and PhD
 - Science and engineering fields
- Enrolled in accredited institution in US by Fall



GRFP Key Elements

Five Year Award – \$132,000

- Three years of support
 - \$32,000 Stipend per year
 - \$12,000 Educational allowance to institution
- International research opportunity: GROW
- Supercomputer access: XSEDE
- Career Life Balance (family leave)
- Awarded to **individual**
- ~ 2000 awards/year (14K applications in 2014!!)

www.nsf.gov/grfp



Research Experiences for Undergraduates (REU)

- Supports active research participation by undergraduate students
- REU projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the REU program.
- REU Sites are based on independent proposals to initiate and conduct projects that engage a number of students in research.
- REU Sites -- single discipline or academic department or may offer interdisciplinary or multi-department research opportunities



REU (continued)

- Students DO NOT apply to NSF to participate in REU activities.
- Students apply directly to REU Sites or to NSF-funded investigators who receive REU Supplements.

http://www.nsf.gov/crssprgm/reu/reu_search.cfm.



CAREER

- Faculty Early Career Development (CAREER) Program
 - Foundation-wide activity
 - NSF's most prestigious awards
 - 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
 - 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
 - Especially encourages women, members of underrepresented minority groups, and persons with disabilities to apply.



CAREER Awards

- US Universities and two- and four-year colleges (including community colleges)
- Non-academic, non-profit orgs (e.g. museum)
- 600 awards per year
- No limit to number of proposals/organization
- A Principal Investigator may submit only one CAREER proposal per annual competition.
- Award size varies across NSF directorates

www.nsf.gov/career



Dear Colleague Letters

<http://www.nsf.gov/pubs/2014/nsf14064/nsf14064.pdf>

- **NSF 14-064: Stimulating Research on Effective Strategies in Undergraduate STEM Education at Two-Year Hispanic Serving Institutions**
- **Focus:** NSF encourages research on the science of broadening participation and related STEM education areas
- **Proposal Types:** Early Concept Grants for Exploratory Research (EAGER) and Conferences, Symposia, and Workshops that focus on evidence-based practices that have been shown to be particularly effective for students at HSIs, as well as exploratory research that may lead to new models and best practices



NSF 14-064: Research Funding

- Understanding factors that will lead to improved retention of students in STEM programs at two-year HSIs
- Understanding barriers and challenges that prevent the transfer of students at two-year HSIs to four-year colleges; understanding factors that promote the transfer of students including articulation agreements
- Improving the quality of STEM undergraduate academic and research experiences at two-year HSIs
- Research on strategies that enhance interest and motivation of students and improve persistence and graduation rates in undergraduate STEM programs at HSIs through innovations in STEM curricula, instructional materials, and research experiences
- Building capacity at HSIs through collaborations with majority institutions that support faculty research, professional development, and mentoring
- **Submission Deadline: May 31, 2014**



Dear Colleague Letter

<http://www.nsf.gov/pubs/2014/nsf14065/nsf14065.pdf>

- NSF 14-065: Announcement of Effort to Broaden the Participation of Students in Two-Year Hispanic Serving Institutions in Science, Technology, Engineering, and Mathematics (STEM)
 - **Focus:** NSF encourages the submission of supplemental funding requests for the purpose of increasing the matriculation of graduates of two-year HSIs to four-year institutions while strengthening strategies for retention in STEM majors, such as providing research experiences for first and second-year undergraduates.
 - **Proposal Types:** Supplements to existing grants



NSF Research Traineeship (NRT)

- New 2014 initiative designed to promote the development of innovative, evidence-based models for graduate education while catalyzing cutting-edge research in high priority research areas
- March 24, 2014; data-enabled science and engineering (DESE) was the first priority research theme
- 258 NRT proposals were received: 75% DESE and 25% on other interdisciplinary themes
- Awards will be made in early FY 2015
- The next solicitation is expected to be released in late fall 2014, with a likely proposal deadline in early 2015.

www.nsf.gov/pubs/2014/nsf14548/nsf14548.htm



International Research Experiences for Students (IRES)

- Supports development of globally-engaged U.S. science and engineering students capable of performing
- Supports active research participation by students enrolled as undergraduates or graduate
- IRES projects involve students in meaningful ways in ongoing research programs or in research projects specifically designed for the IRES program.



IRES (continued)

- IRES students will be recruited and prepared by the U.S. PI(s), then travel to the foreign site to conduct research under the direct supervision of the foreign research mentors.
- IRES support is supplied for projects of three years' duration, and is expected to support three separate student cohorts during those three years.

<http://www.nsf.gov/pubs/2013/nsf13542/nsf13542.htm>

