News from NSF - Highlights from Jean Feldman’s and Duncan McBride’s presentations at the Nov. 2010 Colleges of Liberal Arts Sponsored Programs (CLASP) Conference

Jean Feldman, Head of Policy Office, Division of Institution & Award Support (jfeldman@nsf.gov; tel: 703-292-8243):

- Dr. Subra Suresh is the new NSF Director (6-year tenure); nominated by President Obama, he's a former Dean of Engineering at MIT.
- NSF’s FY11 Budget Request was $7.4 billion, an increase of 8% over last year.
  [Update: The House and Senate agreement in April 2011 on the federal budget for the fiscal year ending September 30, 2011 has not resulted in significant cuts to the NSF budget. However, the budget increase NSF requested was denied.]
- Two new programs:
  - Climate Change Education (CCE)
  - Advanced Technological Education (ATE)
- New opportunities Jean wants to advertise:
  - United States Global Change Research Program (USGCRP)
  - Science Engineering & Education for Sustainability (SEES)
  - Cyberlearning Transforming Education (CTE)
- Interdisciplinary Research (IDR) has a new web site; NSF encourages submission of unsolicited interdisciplinary proposals.
- On Jan. 18, 2011, new cost sharing and data management policies went into effect.
  - Instead of listing cost sharing contributed by the College under the Budget Justification, these contributions must be noted in the Facilities, Equipment and Other Resources section, without a dollar value indicated. This information allows the reviewer to assess the adequacy of resources to complete the proposed project.
  - Data sharing is also now required. This should be a 2-page Supplementary Document that describes how the research will conform to NSF policy on data sharing.

[Note: For assistance with data management issues, contact Andrew Ruether, Swarthmore's instructional technologist for NSE.]
- President Obama's focus on "open government" has meant an emphasis at NSF on "transparency, participation, and collaboration."
  - Usaspending.gov - all federal funding is posted here
  - Research.gov - "an enhancement, the modernization of Fastlane"; notes that you can find here a grant's application status, and/or collaborators in a given discipline, by doing an award search.
  - Data.gov - usable data sets are posted here
Duncan McBride, Program Director, Division of Undergraduate Education (DUE) and Education & Human Resources (EHR): telephone: (703)292-4630, email: dmcbride@nsf.

[Tip: Duncan prefers faculty to read full program announcement, then email him the question or concern; he will set up a phone call appointment only when he deems it necessary.]

- Programs Duncan oversees in DUE:
  - **TUES** (Transforming Undergraduate Education in Science, Technology, Engineering and Mathematics) - "We get more good ideas than we can fund, but keep applying."
  - **S-STEM** (Scholarships in Science, Technology, Engineering, and Mathematics) - "a good bet"
  - **STEP** (Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP))
  - **Robert Noyce Teacher Scholarship Program**

- He also keeps an eye on:
  - **RUI** (Research in Undergraduate Institutions)
  - **REU** (Research Experiences for Undergraduates)

- **TUES** - Formerly known as CCLI, this is the broadest, most innovative program; seeks to provide excellent STEM education for all undergraduates; also interested in developing teaching methods to increase student learning.

  TUES focuses on:
  - Curriculum & faculty development
  - Implementing new instructional strategies (e.g., what are the barriers to students learning physics better)
  - Assessing & evaluating student achievement
  - Conducting research on undergraduate STEM education
  - Spreading teaching methods

  A strong TUES proposal should:
  - Build on existing literature on effective STEM education
  - Build on an existing community of scholars
  - Identify project-specific measurable outcomes

  NOTE: a lot of chemistry equipment is funded through this program; to be successful, a proposal must imbed the equipment in the teaching.

  **Deadlines:**
  - **Type 1** ($200K or less, 2-3 years) – May 26-27, 2011
  - **Type 2** ($600K or less, 2-4 years) – Jan. 13, 2012

- **S-STEM** - $50 million available in FY11.

  [Note: Our need-met financial aid policy makes this program problematic.]
New NSF Grant Guide

A revised version of the NSF Proposal and Award Policies and Procedures Guide (PAPPG) was issued on October 1, 2010 and is effective for proposals submitted or due on or after January 18, 2011. [See the list of significant changes.]

Responsible Conduct of Research (RCR)

Effective January 10, 2010, in compliance with federal requirements, Swarthmore requires the following individuals to demonstrate evidence of having successfully completed RCR training (see full policy).

(1) all Swarthmore undergraduates and postdoctoral researchers working on an NSF-funded project (whether receiving a stipend, salary, academic credit, or in a voluntary capacity); and (2) all Swarthmore faculty who are supervising undergraduates and/or postdoctoral researchers as part of his or her NSF-funded project.

Underutilized Programs

- Co-review with the Research in Undergraduate Institutions (RUI) program is strongly encouraged to increase the competitiveness of your proposal! Sample RUI Impact Statements (a required supplement to the project description for proposals to this program) are available upon request from the CFGR Office.

- Research Opportunity Awards (ROAs) provides grants for work with NSF-supported investigators at other institutions, as part of the RUI program. Applications to this program have a high success rate and can provide an opportunity for you to work with colleagues with whom you have established relationships.

- New grant mechanisms for exploratory research: Grants for Rapid Response Research (RAPID) and Early-concept Grants for Exploratory Research (EAGER) have replaced the Small Grants for Exploratory Research (SGER) program.

- Major Research Instrumentation (MRI): The MRI program supports the acquisition or development of shared research instrumentation that is, in general, too costly and/or not appropriate for support through other NSF programs. The next deadline is January 26, 2012.

- Faculty Early Career Development (CAREER) Program: This program supports tenure-track 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.” The next deadlines are July 25-26, 2011.

More you can do

- Sign up for National Science Foundation Update and RSS Feeds to receive news and program deadlines.

- Use the NSF awards database to help target your proposal to specific programs, request copies of successful proposals from PIs, and find partner institutions for supplemental opportunities, including ROA awards. (Tip: If you want to restrict your search to grants awarded to colleges, type “College” in the Organization field on the Awardee Information tab, along with any other search criteria.)

- Review NSF’s helpful guidelines for demonstrating the Broader Impacts of your research.

- If you’ve served on a review panel, CFGR would love to hear about your experience!
Swarthmore NSF Active Grants

As of 4/25/11, Swarthmore has 8 prime awards and 5 subawards totaling $1.97 million.

Swarthmore NSF Proposals*

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**Success Rate (To Date)**

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Resubmissions

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**Success Rate of Resubmissions (To Date)**

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RUI Proposals

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**Success Rate of RUI Proposals (To Date)**

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Collaborative Proposals

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**Success Rate of Collaborative Proposals (To Date)**

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NSF’s overall funding rate was 23% in FY10, 32% in FY09, and 25% in 2008.

For Swarthmore College Grants submitted in 2010:

- Of the 15 proposals Swarthmore faculty submitted, 13 were submitted by NSE faculty and 2 by social science faculty.
- Of the total 15 submitted, 9 proposals were collaborations (8 with universities and 1 with a corporation)
- 2 Research Opportunity Awards (supplements to NSF grants to universities) were awarded to 2 NSE faculty.***

* Statistics are based on the date of proposal submission.
** This is the success rate for proposals that have received award decisions from NSF as of 4/25/11.
*** These ROA grants are not included in the proposal statistics above because they are directly granted to the host institutions.