

NSF Regional Conference
April 4-5, 2005

Highlights

1. NSF's "watchword" is the integration of research and education. This will benefit predominately undergraduate institutions (PUI's) like USF that focus upon teaching as well as research.
2. A good way for new researchers to learn about the merit proposal review process at NSF is to become a proposal reviewer. Reviewers may be mailed proposals to review or asked to serve on a panel of reviewers at NSF. Faculty interested in serving as a peer reviewer should contact a program officer in the NSF directorate that relates to their research area. Go to the NSF home page and select the appropriate program area in the drop down menu under "Finding Funding:"

<http://www.nsf.gov/index.jsp>

Drill down using the staff directory link and click on the specific program area to obtain the name and contact person at NSF that is closest to your area of interest.

3. The average NSF award size is about \$140K per year over a period of 3 years. HOWEVER, every directorate at NSF is a slightly different culture with very different proposal success rates. It is important to discuss the proposed idea with the program officer as well as the proposed budget. For example, some directorates will pay for academic year release time, and some will not. (Note: USF's status as a PUI gives faculty an advantage in requesting academic year release time because NSF realizes the effect that a heavy teaching load can have on research.)
4. A proposal to NSF may be returned without review for the following reasons:
 - a. Inappropriate topic area, e.g., health issues
 - b. Not enough lead time, e.g., too long past the "target receipt date" (Note target dates are not firm but deadline dates are absolute!)
 - c. Pre-proposal and invitation to submit a full proposal was required.
 - d. Duplicate submission without any revisions
 - e. Missed a firm proposal deadline.
 - f. Formatting issues, e.g., font size, margins, number of pages
5. When an applicant receives the message that a proposal has been declined due to lack of funds it means the idea was good and that the proposal should be resubmitted.

6. An applicant chances for funding doubles with a resubmission as long as the applicant obtains reviewers' comments on rejected proposal. The best procedure to follow is to contact the program officer and ask what the discussion of the proposal was like during the review and if a resubmission is advisable. If it is, the applicant should revise the proposal accordingly and resubmit with a description of how the proposal has been modified.
7. New NSF researchers can collaborate with more experienced researchers at other universities in two ways:
 - a. Submit a collaborative proposal. The lead university provides the project summary and description and other universities provide bio-sketches of participating faculty and a budget. The lead university links the collaborating institution's proposals to theirs and submits to NSF. When the award is made, each collaborative institution receives a grant directly from NSF.
 - b. Work as a subcontractor. The lead university submits the entire proposal and lists USF as a subcontractor. USF provides the lead agency a letter of cooperation and a budget. When the award is made, USF receives a subcontract from the lead agency. Using this option USF is one step removed from NSF and the lead agency can charge indirect costs on up to \$25K of the amount they are planning to give USF.
8. Proposal Guidance
 - a. On the Cover sheet you can list more than one NSF program that would be appropriate to review your proposal. Ultimately NSF decides.
 - b. You can include a supplementary page that lists people that you recommend to review your proposal as well as people that you do not wish to review your proposal—no explanation is needed.
 - c. Your summary statement must address both the educational IMPACT and scientific MERIT of your proposal or the proposal may be returned.
 - d. In the description of the project you must integrate the educational IMPACT into the design of the research project.
 - e. Do not include url's in your project description. An NSF proposal must stand alone.
 - f. You must list your advisor, graduate students and collaborators (with the last 48 months) in your bio-sketch so that NSF will not select these people to review your proposal. NSF is very concerned about Conflicts of Interest (COI).
 - g. In the budget remember that you cannot move anything out of "Participant Support Costs" without prior approval from NSF. Also, for international travel you must use a U.S. carrier. Rare exceptions can be made with prior NSF approval.

- h. Do not ask for any administrative costs (secretarial, telephone, space, office supplies). This is what our indirect costs pay for. (Exceptions may be made for very large multi institutional studies.)
- i. Consultants within your own department cannot be paid with federal funds. Using outside consultants or consultants in a different USF department is allowed. NSF establishes a maximum rate for consultants each year. For FY 05 the rate is \$544/day.
- j. You cannot use federal funds to augment your pay above the equivalent of your 100% pay rate over a 12 month period.
- k. In developing your budget, touch base with your program officer about the average costs paid in specific budget lines, e.g., travel.
- l. Do not make the format of your proposal too fancy. Avoid special fonts, elaborate graphics. These may not transfer very well when printed out by NSF.
- m. Make sure that you use complete citations for your references. Do not make the reviewers hunt for this information. Also understand that the researchers you reference may be contacted to review your proposal!

9. Enhancing the scientific “Merit” scores of your proposal

- a. Take some risks
- b. Choose a topic that is important today as well as in the future
- c. Use qualified personnel
- d. Show that you are well organized
- e. Describe the use of up-to-date technology and/or statistical procedures
- f. Describe the availability of all necessary infrastructure

10. Enhancing the educational “Impact” scores of your proposal

- a. Be creative—think outside the box—about new ways to prepare scientists of the future
- b. Find ways to communicate with the broader public
- c. Find ways to reach out to underrepresented groups
- d. Put yourself in NSF’s “shoes,” and pretend that you are justifying your project to 12 U.S. taxpayers!

11. Outcomes

- a. If you are turned down, you will receive a letter with a summary of the reviewers’ comments
- b. If you are being considered for funding, you will be contacted by phone with possible requests for budget adjustments (if they plan to give you 10% less than what you requested, you have the right to adjust the scope of work you described).

- c. If you are being funded, a written award will be send to you and the Office of Sponsored Projects. (You do not actually have an award until this notice arrives.)

12. Cost Sharing is strongly discouraged unless a requirement of the specific NSF program. If a specific level of cost share is stated, do not exceed this amount.

13. Submission changes.

- a. NSF will continue to use FastLane until NSF is satisfied that the new Grants.gov system will meet their needs
- b. This spring NSF will test out 15 application packages using Grants.giv, but FastLane will be available as a fall-back option.
- c. All USF applications submitted via Grants.gov will go through USF's Office of Sponsored Projects.

14. Overview of key NSF funding programs

- a. SGER (Small grants to support exploratory research). These proposals do not go through the normal peer review process. They are reviewed only by the program officer. Provides up to \$100K a year. Discussions with program officer required.
- b. Standard NSF research grant. Peer review is required. Must address Merit and Impact criteria. See Grant Proposal Guide for additional information.

<http://www.nsf.gov/funding/preparing/>

- c. RUI (Research at Undergraduate Institutions). These proposals are reviewed like the standard NSF grant proposals, but NSF allows applicants to address impact of the project on the institution. This gives the PUI a chance to compete more effectively for program funds.

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf00144

- d. ROA's (Research Opportunity Awards). These grants provide supplements to existing NSF grants to allow a researcher from another institution to work on the project. Researchers interested in seeking this type of support should review the NSF award database for funded projects that fall into their area of interest. Go to the following site to search for active awards:

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

- e. REU (Research Experiences for Undergraduates) Sites. Applicants may propose to provide research training experiences for 8-10 undergraduate

students in the summer for 8-12 weeks. Students receive a stipend of about \$400/week. USF faculty can apply to run such a program and/or suggest that their students review the REU site listing and find a project that they would like to participate in. Go to the following site for more information:

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf01124

- f. REU supplements. Researchers with a current NSF grant may apply to their program officer to support the participation of undergraduates in their research. NSF will support 1-2 undergraduate students by awarding \$6K per student as a supplement to the existing NSF award.
- g. MRI (Major Research Instrumentation). Provides from \$100K to \$2M for the acquisition and development of research equipment. No matching funds are required.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=6672

- h. GOALI (Grant Opportunities for Academic Liaison with Industry). A specific amount of money is set aside for this program. There must be a C-P.I. from Industry involved in the project. The goal is to encourage University-Industry interaction in R&D and training.

<http://www.nsf.gov/eng/dmii/goali.jsp>

- i. NSF Graduate Teaching Fellows. Provides \$200K--\$500K per year for up to 4 years to have university graduate students in the NSF areas working in the public schools. Goals are to improve K-12 science, math, engineering and/or technology instruction, help university students learn how to teach and communicate, and strengthen relationships between K-12 and universities.

http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5472

- j. CAREER. For career development (integrated teaching and research plan) for new faculty. \$400K over 5 years. Must show institutional commitment to faculty member's growth as a researcher and teacher. New announcement:

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf05579