

4. Other Issues Related to Merit Review

Use of Preliminary Proposals

Some programs try to manage proposal pressure by requiring submission of preliminary proposals. The intent of preliminary proposals is to limit the burden imposed on proposers, reviewers and NSF staff. Normally, preliminary proposals require only enough information to make fair and reasonable decisions regarding encouragement/discouragement of a full proposal. Review of preliminary proposals varies widely, ranging from non-binding advice from program officers to proposers, to recommendations from external reviewers.

The use of preliminary proposals has increased in frequency over the past several years in NSF programs. In FY 2000, NSF acted on 1,281 official preliminary proposals that were logged into the proposal processing system. (Almost all through FastLane.) Of these, NSF encouraged the submission of full proposals in 236 cases and discouraged submission in 1,045 cases.

Small Grants for Exploratory Research (SGER)

Since the beginning of FY 1990, the Small Grants for Exploratory Research (SGER) option has permitted program officers throughout the Foundation to make short-term (one to two years), small-scale grants *without formal external review*. Characteristics of activities that can be supported by an SGER award include: preliminary work on untested and novel ideas; application of new approaches to “old” topics; ventures into emerging research areas; and narrow windows of opportunity for data collection, such as natural disasters and infrequent phenomena.

Potential SGER applicants are encouraged to contact an NSF program officer before submitting an SGER proposal to determine its appropriateness for funding. As potential SGER applicants have become familiar with this practice, the SGER funding rate has steadily increased over the past eight years. Additional details are shown in **Text Figure 10**.

Text Figure 10
Small Grants for Exploratory Research (SGER)

	Fiscal Years							
	1993	1994	1995	1996	1997	1998	1999	2000
Proposals	309	258	228	205	244	302	278	317
Awards	213	185	168	144	194	250	224	272
Funding Rate(%)	69	72	74	70	80	83	81	86

NSF received 317 SGER proposals in FY 2000 and made 272 awards. Directorate-level data on SGER proposal pressure and funding rates are presented in **Appendix Table 9**.

The total amount awarded to SGERs in FY 1999 was \$12,293,477. The average SGER award amount in FY 2000 was \$57,813, a 33 percent increase relative to the FY 1997 average award amount of \$43,367. Despite these increases, the total NSF investment in SGERs about 0.6 percent of the operating budget for research and education, far below the five percent that program officers may commit to SGER awards. The history of SGER awards by directorate from FY 1998 to FY 2000 is presented in **Appendix Table 10**.

Accomplishment Based Renewals and Creativity Extensions

In addition to SGERs, NSF program officers may recommend *accomplishment based renewals* and *creativity extensions*. In 2000 there were 39 requests for accomplishment based renewals, 27 of which were awarded. There were also 43 creativity based extensions made to existing NSF grants.

In an accomplishment-based renewal, the project description is replaced by copies of no more than six reprints of publications resulting from the research supported by NSF (or research supported by other sources that is closely related to the NSF-supported research) during the preceding three- to five-year period. In addition, a brief (not to exceed four pages) summary of plans for the proposed support period must be submitted. All other information required for NSF proposal submission remains the same.

A creativity extension is an extension of funding for up to two years for certain research grants. The objective of such extensions is to offer the most creative investigators an extended opportunity to attack "high-risk" opportunities in the same general research area, but not necessarily covered by the original/current proposal. Special Creativity Extensions are initiated by the NSF Program Officer based on progress during the first two years of a three-year grant.

Exemptions to the Merit Review Process

Authorized exemptions to the peer review process are listed in NSF Manual 10, Section 122 and include routine award actions such as continuing grant increments and no-cost extensions. In special circumstances, the Director or designee may waive peer review requirements. In most cases, these waivers are granted for proposals which present extraordinary problems in obtaining external peer reviews or are otherwise not suited for the usual merit review process.

However, NSF staff always closely reviews these proposals. Such waivers of peer review were granted five times during FY 2000, compared to seven times during FY 1999.

Committees of Visitors (COV)

NSF regularly assesses performance of all aspects of the merit review system, comparing its efficiency, effectiveness, customer satisfaction and integrity against similar processes run by other organizations. For example, panels of external experts called Committees of Visitors (COVs) are convened to review the technical and managerial stewardship of NSF programs on a three-year cycle.¹⁰ In FY 2000, there were approximately 250 COV members participating in this performance assessment process. This process generated 64 reports covering 78 of NSF's approximately 200 programs (see **Appendix Table 11** for a schedule of program evaluations). COVs report on the integrity and efficiency of the processes for proposal review and the quality of results of NSF's programs.

The recommendations of COVs are reviewed by management and taken into consideration by NSF when evaluating existing programs and future directions for the Foundation. Each COV must operate in accordance with the Federal Advisory Committee Act (FACA) of 1972. In compliance with FACA regulations, virtually all COVs are established as subcommittees of an existing chartered directorate advisory committee, and the COV report is reviewed and approved by the parent advisory committee. The cognizant assistant director (AD) provides the parent advisory committee with a written response to each COV report. The COV's report and the AD's response are public documents; some have been publicized in the professional literature.

¹⁰ In FY 2000, about 37% of NSF's 200 program portfolio was evaluated by COVs. Approximately 40% of NSF's portfolio was evaluated by COVs in FY 1999. The remaining portions of NSF's portfolio will be evaluated by COVs in FY 2001, to complete the full three-year cycle of assessment of NSF's programs.