

# INTERDISCIPLINARY GRANTS IN THE MATHEMATICAL SCIENCES

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## *Program Solicitation 1997*

DIVISION OF MATHEMATICAL SCIENCES

**DEADLINE:** *September 17, 1997*



NATIONAL SCIENCE FOUNDATION

# Interdisciplinary Grants in the Mathematical Sciences

## Purpose and Scope

The objectives of Interdisciplinary Grants in the Mathematical Sciences (IGMS) are to enable faculty to undertake activities designed to expand their skills and knowledge into areas beyond their disciplinary expertise, and to subsequently apply the knowledge to their research and to enrich the educational experiences and broaden the career options for students. These awards will be used to support interdisciplinary experiences. These experiences can be at the PI's institution, outside the PI's department or at a different institution (e.g., academic, financial, industrial) in a non-mathematical sciences environment. Activities include, but are not limited to study, research, teaching, or a combination of these. These awards are in addition to those available in the Grant Opportunities for Academic Liaison with Industry (GOALI). For further details on GOALI, see NSF95-112.

## Proposal Content

The proposal must include:

- a well-defined description of the proposed activity and a corresponding implementation plan;
- a statement delineating the PI's expectation of the impact of this experience on the PI's subsequent research and education activities;
- a plan for applying the newly acquired expertise to broaden the research and educational experiences and career options for students;
- an evaluation phase including plans and metrics to be used to assess the success of the project;
- a dissemination plan, to share the outcome(s) with the community; and
- an approximate time schedule for accomplishing the proposed activities.

It is expected that the recipients will immerse themselves in a discipline other than the mathematical sciences that makes use of the mathematical sciences in a significant way. Hence, the recipient should reside in a department or laboratory other than the mathematical sciences for the duration of the award.

The PI must make a commitment to remain in academia for a minimum of one year following the end of the grant, should an award be made. To help ensure institutional support of these activities, there should be a co-PI at the level of a dean (or higher level university official). A brief description from the latter of the expected impact of these activities on the institution's research and education efforts, as well as a statement of expected duties while on assignment to the host department, must be included in the proposal. The proposal must also in-

clude a statement of commitment from the host institution or department which contains as a minimum: (a) commitment for an office as well as lab space, if appropriate, in the host department, for the award duration, (b) assurance that the investigator will be treated as a regular faculty member within the host unit, and be granted authority to conduct the activities in accordance with their best judgment, consistent with the organization's policies, (c) identification of at least one senior person in the host organization who will serve as host to the awardee; and (d) approval by a department head or above at the host organization.

## Eligibility Criteria

To be eligible for these awards, the PI must hold a tenured or tenure-track position at the academic institution submitting the proposal and have a strong background in one of the mathematical sciences within the purview of the Division of Mathematical Sciences (see the DMS Web page at <http://www.nsf.gov/mps/dms>).

## Evaluation Criteria

Proposals will be reviewed in accordance with established Foundation procedures and the four general criteria described in the Grant Proposal Guide (NSF 95-27). Additional criteria will be:

- (1) the level of broadening of knowledge as measured by the distance of the proposed activities from current interests.
- (2) the viability and potential impact of the proposed activities on the PI's education and research responsibilities as well as impact on the research and education enterprise.

Significant institutional cost-sharing will also be an evaluation factor in the review of these proposals. Examples are customary university sabbatical support, equipment and travel.

## Award and Budget Information

The proposed duration of the award should be consistent with the nature of the proposed activities. They will normally be for a twelve month period. The awardee institution shall contribute a minimum of 50% of academic year faculty support and health benefits for twelve months.

It is expected that up to 10 awards will be made depending on the quality of the proposals submitted and the availability of funding. The grant amounts will not exceed \$75,000 per award. Faculty salaries are limited to 50% of academic year plus two months summer salary within a 12-month period. Other fringe benefits and indirect costs are allowable, subject to the \$75,000 limit. Requests of additional amounts for equipment may be considered.

Allowable costs can be found in Chapter VI of the NSF Grant Proposal Manual (NSF 95-26).

## PROPOSAL PREPARATION AND SUBMISSION

The cover sheet must be submitted via FastLane no later than September 17, 1997. Submission of the entire proposal via FastLane is strongly encouraged. All documentation must be received at NSF by September 23, 1997. The web location for FastLane is

[www.fastlane.nsf.gov](http://www.fastlane.nsf.gov)

The cover sheet and signed certification page must be sent to:

Announcement No NSF 97-99  
NATIONAL SCIENCE FOUNDATION PPU  
4201 Wilson Blvd Room P60  
Arlington VA 22230

If only the cover sheet has been submitted electronically, then ten (10) copies of the entire proposal must also be sent to NSF. Only one (1) copy of NSF Form 1225, Information about Principal Investigator/Project Director, should be sent, attached to the original signed proposal.

Proposals not meeting these conditions will be returned.

## WHEN TO SUBMIT

Proposals submitted in response to this solicitation must be:

(1) received by NSF no later than September 22, 1997; or (2) be postmarked no later than five (5) days prior to the deadline date; or (3) be sent via commercial overnight mail no later than two (2) days prior to the deadline date.

Proposals not meeting these conditions will be returned.

## PROPOSAL EVALUATION AND REVIEW

It is anticipated that panel reviews will be used to evaluate the proposals, although *ad hoc* mail reviews may also be solicited.

## NOTIFICATION OF AWARDS

It is expected that awards will be made no later than Winter 1998.

## ADDITIONAL INFORMATION

General inquiries should be made to:

Lloyd E. Douglas  
Mathematical Sciences Infrastructure Program  
Division of Mathematical Sciences  
Room 1025

National Science Foundation  
4201 Wilson Boulevard  
Arlington, VA 22230  
Telephone: (703) 306-1874  
[ldouglas@nsf.gov](mailto:ldouglas@nsf.gov)

## GRANT ADMINISTRATION

Grants awarded as a result of this announcement are administered in accordance with the terms and conditions of NSF GC-1, "Grant General Conditions," or FDP-III, "Federal Demonstration Partnership General Terms and Conditions," depending on the grantee organization. Copies of these documents are available at no cost from the NSF Forms and Publications Unit, telephone (703) 306-1130, or via e-mail [pubs@nsf.gov](mailto:pubs@nsf.gov) (Internet). More comprehensive information is contained in the NSF Grant Policy Manual (NSF95-26, August 1995), for sale through the Superintendent of Documents, Government Printing Office, Washington, DC 20404. The telephone number at GPO is (202) 783-3238 for subscription information.

## REPORTING REQUIREMENTS

Upon completion of the project, a Final Project Report (NSF Form 98A), including Part IV Summary, will be required. NSF will send the form with Part I information preprinted to the Principal Investigator (Project Director) approximately one month prior to the grant's expiration date. Applicants should review the sample form in the GPG prior to proposal submission so that appropriate tracking mechanisms are included in the proposal plan to insure that complete information will be available at the conclusion of the project.

The Foundation provides awards for research in the sciences and engineering. The awardee is wholly responsible for the conduct of such research and preparation of the results for publication. The Foundation, therefore, does not assume responsibility for the research findings or their interpretation.

The Foundation welcomes proposals from all qualified scientists and engineers and strongly encourages women, minorities, and persons with disabilities to compete fully in any of the research related programs described here. In accordance with federal statutes, regulations, and NSF policies, no person on grounds of race, color, age, sex, national origin, or disability shall be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving financial assistance from the National Science Foundation.

Facilitation Awards for Scientists and Engineers with Disabilities (FASED) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF projects. See the program announcement or contact the program coordinator at (703)306-1636.

Privacy Act. The information requested on proposal forms is solicited under the authority of the National Science Foundation Act of 1950, as amended. It will be used in connection with the selection of qualified proposals and may be disclosed to

qualified reviewers and staff assistants as part of the review process; to applicant institutions/grantees; to provide or obtain data regarding the application review process, award decisions, or the administration of awards; to government contractors, experts, volunteers, and researchers as necessary to complete assigned work; and to other government agencies in order to coordinate programs. See Systems of Records, NSF 50, Principal Investigators/Proposal File and Associated Records, and NSF-51, 60 Federal Register 4449 (January 23, 1995). Reviewer/Proposal File and Associated Records, 59 Federal Register 8031 (February 17, 1994).

Public Burden. Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of your receiving an award.

The public reporting burden for this collection of information is estimated to average 120 hours per response, including

the time for reviewing instructions. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Gail A. McHenry, Reports Clearance Officer, Information Dissemination Branch, National Science Foundation, 4201 Wilson Boulevard, Suite 245, Arlington, VA 22230.

The National Science Foundation has TDD (Telephonic Device for the Deaf) capability, which enables individuals with hearing impairment to communicate with the Foundation about NSF programs, employment, or general information. To access NSF TDD, dial (703) 306-0090; for FIRS, 1-800-877-8339.

This program is described in the Catalog of Federal Domestic Assistance category 47.049 (Mathematical and Physical Sciences).