

SPECIAL COMPETITION IN SYSTEMIC BIOLOGY:

PARTNERSHIPS FOR ENHANCING EXPERTISE IN TAXONOMY (PEET)

**DIRECTORATE FOR BIOLOGICAL SCIENCES
DIVISION OF ENVIRONMENTAL BIOLOGY**

DEADLINE DATE: *March 1, 1999*

NATIONAL SCIENCE FOUNDATION

INTRODUCTION

For the next generation of astronomers, the stars will still be there; for the next generation of biologists, the subjects of their study may not be. The loss of biological diversity - of species and their genetic heritage, of communities and habitats, both aquatic and terrestrial - is accelerating in many parts of the world. That loss, exacerbated by our incomplete knowledge of the Earth's biota, impedes stewardship, limits management, and imperils conservation of biological resources. Two components of this global problem have been emphasized in all recent reports. First, fewer systematists (taxonomists) are being trained in museums and universities as education is reduced in evolutionary and organismal biology. Second, knowledge is rudimentary for microbes, protists, fungi, and invertebrates, groups in which vast numbers of undescribed species are predicted for habitats still poorly explored on Earth.

The loss of biological diversity has been accompanied by a loss in the expertise necessary for identifying and inventorying the biota of the Earth. Retirement of taxonomic specialists, shifts in academic recruitment and staffing, and reductions in graduate training all conspire to diminish the knowledge that is needed to answer what the National Science Board has labeled a global crisis ("Loss of Biological Diversity: A Global Crisis Requiring International Solutions," NSB 89-171). The rate of "extinction" among professional taxonomists led a National Science Foundation (NSF) task force to call for enhanced training in taxon-specific expertise ("Adapting to the Future: Report of the BBS Task Force Looking to the 21st Century," NSF 91-69). The President's Committee of Advisers on Science and Technology (PCAST) has vigorously endorsed this research and training emphasis in its 1998 report "Teaming with Life: Investing in Science to Understand and Use America's Living Capital" (available on the PCAST homepage at <http://www.whitehouse.gov/WH/EOP/OSTP/Environment/html/teamingcover.html>).

Exacerbating the loss of expertise is the poor state of knowledge of many aquatic and terrestrial organisms. Vast numbers of species in understudied, "invisible" groups constitute critical elements of food chains and ecosystems; the high proportion of unrecognized species in these groups limits research and progress in many areas of the biological sciences. Taxonomic expertise is needed to identify and classify the world's biological resources and to organize this knowledge in accessible databases in order to ensure stewardship and rational use.

DESCRIPTION AND OBJECTIVES OF PEET

The NSF, in partnership with academic institutions, botanical gardens, freshwater and marine institutes, and natural history museums, seeks to enhance and stimulate taxonomic research and help prepare future generations of experts. NSF announces a third special competition,

Partnerships for Enhancing Expertise in Taxonomy (PEET), to support competitively reviewed research projects that target groups of poorly known organisms. Abstracts for awards from the first two competitions and related documents on taxonomic monography are available through the PEET homepage (<http://www.nhm.ukans.edu/~peet>) to provide guidance to prospective applicants. The PEET activity is designed to encourage the training of new generations of taxonomists and to translate current expertise into electronic databases and other formats with broad accessibility to the scientific community. Three major elements are required of a project submitted in the PEET Special Competition: 1. **Monographic Research**; 2. **Training**; and 3. **Computer Infrastructure**.

Monographic Research. Applicants must present a plan of research for taxonomic revision or monograph, with emphasis to be given to organisms that are little studied or to groups in which taxonomic expertise is limited or vanishing (microbes, protists, fungi, and invertebrates). Specialists on such groups are encouraged to apply. Also encouraged are investigators currently studying better known groups or other scientists with taxonomic interests who wish to extend analyses to neglected taxa, directly or by mentoring students. Choice of organisms for study must be justified in the proposal and will be evaluated by the merit review process. General guidance is provided in several reports: a 1980 National Academy of Sciences report [Committee on Research Priorities in Tropical Biology, 1980. "Research Priorities in Tropical Biology." National Academy of Sciences, Washington, DC]; the 1989 National Science Board report cited above; a 1992 National Academy report [Panel on Biodiversity Research Priorities, 1992. "Conserving Biodiversity: A Research Agenda for Development Agencies." National Academy Press, Washington, DC]; and the 1994 report "Systematics Agenda 2000: Charting the Biosphere, Technical Report" (Systematics Agenda 2000 Consortium, New York, NY). The 1980 National Academy report indicated "that a high priority ought to be set on training and support for much larger numbers of systematists oriented toward tropical organisms." Organisms mentioned in that report include fungi, nematodes, mollusks, insects, fishes, and flowering plants. The subsequent reports cited do not specify taxonomic groups but in general emphasize organisms that are poorly known or little studied; these would include microbes, protists, fungi, and invertebrates. Potential investigators with questions about which organisms are eligible for study in the PEET special competition should contact Program Officers in Systematic Biology (see section on Contacts for Additional Information for telephone, e-mail, and address information). If groups of investigators with complementary strengths in taxonomy from multiple institutions wish to collaborate, submission of a Collaborative Proposal should be considered (see the *Grant Proposal Guide*, NSF 99-2, Chapter II, Section D.12(b), hereafter *GPG*, available on the NSF homepage at <http://www.nsf.gov/cgi-bin/getpub?nsf992> for guidance).

Training. An internship or traineeship is a required element of PEET projects, in which minimally two student taxonomists are trained as experts on the organisms under study. The anticipated five-year duration of projects is designed to ensure continuous support of project personnel and to enable completion of major taxonomic revisions and monographs. Increased participation of members of groups underrepresented in science is encouraged. Foreign students enrolled at a U.S. institution are also eligible for support. Support for the experts-in-training, if considered employees by the submitting institution, can be requested under Personnel categories of the Proposal Budget (NSF Form 1030); otherwise, support should be requested under Participant Support Costs (category F, NSF Form 1030; note that indirect costs are not allowed on Participant Support). PEET awards are eligible for supplementation through the Research Experiences for Undergraduates (NSF 96-102) and Research Opportunity Awards (NSF 94-79) programs; see the *NSF Guide to Programs*, available on the NSF Documents OnLine system at <http://www.nsf.gov/>, for details.

Computer Infrastructure. All PEET projects are expected to incorporate computerization of various taxonomic tasks and products; specimen databases, artificial intelligence systems, computer-aided image analysis, or interactive identification keys are examples. Specific activities or products will depend upon the state of the science for that particular taxonomic group; the suitability of proposed computerization activities will be evaluated through the merit review process. The UNESCO-supported Expertise Center for Taxonomic Identification and the Australian ERIN: Environmental Resources Inventory Network (<http://www.erin.gov.au/life/>) provide models for computer-based activities. Valuable guidance and resources are available from the Integrated Taxonomic Information System (ITIS, available at <http://plants.usda.gov/itis/>), a development of the multi-agency National Biological Information Infrastructure Program managed at the U.S. Geological Survey. Training in computer activities for Principal Investigators and students, through workshops or other means, would constitute an eligible expense under PEET awards. Examples of Web-accessible taxonomic products from prior PEET awards are available from the PEET Homepage.

ELIGIBILITY

Proposals under the PEET Special Competition will be accepted from U.S. institutions including botanical gardens, marine or freshwater institutes, and natural history museums that are eligible for awards from the National Science Foundation. Non-academic institutions with university-affiliated training programs are especially encouraged to apply. When appropriate, collaborating scientists at foreign institutions can be accommodated through consultant or

subaward mechanisms administered by the submitting U.S. institution.

Normally, NSF does not support research with disease-related goals, including work on the etiology, diagnosis, or treatment of physical or mental disease, abnormality, or malfunction in human beings or animals. Studies of animal models for such conditions, the design and testing of drugs or other procedures for their treatment are also not eligible for support. NSF does not normally support technical assistance, pilot plant efforts, research requiring security classification, the development of products for commercial marketing, or market research for a particular project or invention.

AWARD INFORMATION

NSF anticipates making 10-20 awards as continuing grants in Fiscal Year 1999 in this third PEET Special Competition, contingent upon the availability of funds and the quality of proposals received. Special Competitions in future years are contingent upon the availability of funds. One-time renewals (submitted in the fourth or fifth year of the initial PEET award, and for up to five additional years) may be considered but will compete with new proposals, and again are contingent upon availability of funds. Review will be complete by late spring, with awards announced in the summer. The *GPG* provides relevant forms and rules for proposal preparation.

SCOPE AND DURATION OF PROJECTS

Projects designed for five years (60 months) of effort are encouraged, with yearly budgets not to exceed \$150,000 (direct plus indirect costs), or \$750,000 total. Projects may address large, natural genera or groups of phylogenetically related genera, and through collaboration with foreign colleagues, may involve field work in any part of the world as well as laboratory and museum study. Standard components of taxonomic monography - species description and diagnosis, geographic distribution, scientific nomenclature, identification keys, illustration - are expected in all projects; student training and computerization activities will complement these components.

Projects under the PEET Special Competition are intended to augment revisionary and monographic projects currently supported by the Systematic Biology program at NSF. PEET proposals require training and computerization components beyond those representative of current awards in Systematic Biology. PEET proposals will be reviewed in response to the **March 1, 1999 deadline**; regular proposals in Systematic Biology compete following the **June 15 and December 15 target dates** for the Systematic and Population Biology Cluster in the Division of Environmental Biology or the **first-Friday-in-November deadline** for the Biotic Surveys and Inventories Program.

The PEET Special Competition is designed to complement the Biotic Surveys and Inventories Program (NSF 98-158) which focuses on the collection, description, and classification of broad taxonomic resources (for example, all vascular plants, all arthropods, all vertebrates) in a particular geographic area, with a commensurate reduction in detail accorded each species. **Duplicate proposals to the two programs are not allowed.** PEET, the Biotic Surveys and Inventories competition, and the regular programs in Systematic Biology and in Biological Research Collections (NSF 98-126) address in a coordinated manner the three major missions described in the "Systematics Agenda 2000" report cited above in order to discover, understand, and manage systematic knowledge of biological diversity around the globe.

INSTRUCTIONS FOR PROPOSAL SUBMISSION

A. Proposal Preparation Instructions

Proposals submitted in response to this program announcement must be prepared and submitted in accordance with the general guidelines contained in the *Grant Proposal Guide (GPG)*, NSF 99-2. Standard forms and an explanation of their preparation and purpose are contained in the *GPG*. Please note the 15-page limit on the Project Description (to include the Results of Prior NSF Support section, and all tables and figures) and the restrictions on appended materials. The complete text of the *GPG* (including electronic forms) is available electronically on the NSF Web site at <http://www.nsf.gov/cgi-bin/getpub?nsf992>. Paper copies of the *GPG* may be obtained from the **NSF Publications Clearinghouse**, telephone (301) 947-2722 or by e-mail from pubs@nsf.gov.

Proposals must be submitted via the NSF FastLane System. Instructions and guidelines for the FastLane submission of proposals are detailed in "Instructions for Preparing and Submitting a Standard Proposal via FastLane" located at <https://www.fastlane.nsf.gov/a1/newstan.htm>. Also, see the "FASTLANE SUBMISSION" section below.

- **Cover Page (NSF Form 1207)** -- In the NSF FastLane system follow instructions on proposal preparation. When completing the Cover Sheet click on the "Add Org Unit" button. Highlight "DIRECT FOR BIOLOGICAL SCIENCES" and click "OK". Scroll down to "DIVISION OF ENVIRONMENTAL BIOLOGY" and highlight "Systematic Biology". Clicking "OK" designates this program as the NSF organizational unit of consideration.

Proposers are reminded to identify the program announcement number (NSF 99-15) in the program announcement/solicitation block on the NSF Form 1207,

"Cover Sheet for Proposal to the National Science Foundation." Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

- **Project Description** --The proposal should address the following five issues in the Project Description or where otherwise indicated:

1. **Taxonomic Focus.** All groups of organisms whether aquatic or terrestrial are eligible for study, but preference will be given to those designated as understudied or critical. If the target group of organisms is delimited geographically and not taxonomically, the Principal Investigator should justify why the particular regional focus has been adopted; otherwise, faunistic or floristic projects (or their microbial or fungal counterparts) should be directed to the Biotic Surveys and Inventories Program. The proposal must include a digest of currently recognized taxonomic entities, a summary of known museum specimens (number, quality, accessibility), and a review of pertinent literature. If the proposed research includes the collection of vertebrate animals, the Investigator must address the guidelines in the *GPG*, Chapter II, Section D.12(d). Proposals to study organisms that have a minimal museum (or collections) tradition should indicate this fact, discuss the form that useful collections or cultures would take as well as their impact on future taxonomic practice in the group, and present plans for implementation and curation of such collections, stocks, or cultures.

2. **Methods of Study.** Practices will vary according to the organisms proposed for study, but attention should focus on collection and sampling strategies, specimen preparation with computerization of collection data, acquisition of character data in formats retrievable by computer, and explicit protocols for evaluating and synthesizing data. Field collecting may be necessary for some groups; others may be well represented in existing collections. The care of vouchers and other collections should be described; specimen cases and other curatorial supplies constitute eligible expenses. Where taxon ranges extend beyond the borders of the U.S.A., attention should be given to collaboration with foreign scientists and students. Prospective investigators wishing to establish collaborations with foreign scientists should review the guidance and opportunities provided by NSF's Division of International Programs (information available on the NSF homepage at <http://www.nsf.gov/sbe/int/>).

3. **Training.** A minimum of two collaborating experts-in-training is required for each project, whether undergraduate, graduate, or postgraduate in status. As students graduate or otherwise complete their traineeship during the five-year project, new trainees should be recruited to maintain a minimum of two for each project. Trainees should be full partners in the research, conceptually and operationally. If known at the time of application, a trainee's identity and qualifications should be described in a Biographical Sketch,

following *GPG* guidelines; if not known, then recruitment procedures should be described in the Project Description. The submitting institution's rules govern whether trainees can be designated as Co-Principal Investigators on the Cover Sheet (NSF Form 1207).

4. *Conceptual Issues*. In the context of a highly competitive merit review, proposals must make a case for substantial impact on progress in taxonomy (note NSF's merit review criteria described in the *GPG* and the Merit Review section below). The proposal should discuss how improvement in the taxonomy of the targeted organisms relates to issues fundamental to systematics. Phylogeny, character evolution, biogeography, coevolution, or ecological interaction are examples of conceptual domains likely to prove relevant to taxonomic revisionary and monographic work (see the report "Systematics Agenda 2000: Charting the Biosphere" cited above; the 1991 report "The Sustainable Biosphere Initiative" from the Ecological Society of America; and the 1997 report "The Microbial World: Foundation of the Biosphere" from the American Academy of Microbiology).

5. *Dissemination of Results*. Publication of results in peer-reviewed outlets is expected for all projects. In addition, enhanced or supplemented media such as computer databases accessible on the Web, image-based identification aids, or GIS-compatible specimen records are expected.

- ***Special Information and Supplementary Documentation***: Provide information such as letters of collaboration, collecting permits, environmental impact statement and other allowed items as noted in the current issuance of the *Grant Proposal Guide (GPG)*, Chapter II, Section D. Use one of the following options for submitting Special Information and Supplementary Documentation: 1) include letters of support and other materials via the FastLane submission by scanning the documents (scanned at 300 dpi, black and white or gray scale) and adding them at the end of the Project Description file. This information is not counted as part of the 15 page limit of the Project Description, or 2) mail 15 collated copies of all materials to the Special Competition in Systematic Biology: Partnerships for Enhancing Expertise in Taxonomy (PEET) at the same time that the signed cover sheet and certification page, BIO proposal classification form, and animal certification (if applicable) are sent (see the Proposal Due Dates section below).
- ***BIO Proposal Classification Form (PCF)*** -- Complete the BIO PCF, available on the NSF FastLane system. The PCF is an on-line coding system that allows the Principal Investigator to characterize his/her project when submitting proposals to the Directorate for Biological Sciences. Once a PI begins preparation of his/her proposal in the NSF FastLane system and selects a division, cluster, or program within the Directorate for Biological Sciences as the first or only organizational unit to review

the proposal, the PCF will be generated and available through the Form Selector screen. Additional information about the BIO PCF is available in FastLane at <http://www.fastlane.nsf.gov/a1/BioInstr.htm>.

B. Proposal Due Dates

Proposals must be sent by 5:00 p.m., submitter's local time, March 1, 1999 via the NSF FastLane system.

Mail the following materials directly to Partnerships for Enhancing Expertise in Taxonomy (PEET):

- a paper copy of the cover sheet, including the certification page (page 2 of 2) signed by the PI(s) and an institutional representative;
- the BIO classification form;
- animal certification, **if applicable**; and,
- fifteen (15) collated copies of the Special Information and Supplementary Documentation material only if the PI has opted to send in hard copy instead of inserting scanned copies at the end of the Project Description file in the FastLane submission.

Unless requested by NSF, additional information may not be sent following proposal submission.

The mailed materials must be received by March 8, 1999. Send materials to:

Partnerships for Enhancing Expertise in Taxonomy (PEET) –
NSF 99-15
Division of Environmental Biology
National Science Foundation
4201 Wilson Boulevard, Room 635
Arlington, VA 22230

Do not mail copies of the proposal. NSF will make the appropriate number of copies of the proposal.

C. FastLane Submission

In order to use NSF FastLane to prepare and submit a proposal, you must have the following software: Netscape Navigator 3.0 or above, or Microsoft Internet Explorer 4.01 or above; Adobe Acrobat Reader 3.0 or above for viewing PDF files; and Adobe Acrobat 3.X or Aladdin Ghostscript 5.10 or above for converting files to PDF.

To use FastLane to prepare the proposal your institution needs to be a registered FastLane institution. A list of registered institutions and the FastLane registration form are located on the FastLane Home Page. To register an organization, authorized organizational representatives must complete the registration form. Once an organization is registered, PIN for individual staff are available from the organization's sponsored projects office.

To access FastLane, go to the NSF Web site at <http://www.nsf.gov>, then select “FastLane,” or go directly to the FastLane home page at <http://www.fastlane.nsf.gov/>. Please see “Instructions for Preparing and Submitting a Proposal to the NSF Directorate for Biological Sciences” located at <http://www.fastlane.nsf.gov/a1/BioInstr.htm>. Additionally, read the “PI Tipsheet for Proposal Preparation” and the “Frequently Asked Questions about FastLane Proposal Preparation,” accessible at <https://www.fastlane.nsf.gov/a1/A1Prep.htm>

IMPORTANT NOTE: For technical assistance with FastLane, please send an e-mail message to biofl@nsf.gov. If you have inquiries regarding other aspects of proposal preparation or submission, please send an e-mail message to sysrev@nsf.gov before the deadline date for submission.

MERIT REVIEW

A. NSF Proposal Review Process

Reviews of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program Officers charged with the oversight of the review process. NSF invites the proposer to suggest, at the time of submission, the names of appropriate or inappropriate reviewers. Special care is taken to ensure that reviewers have no immediate and obvious conflicts with the proposer. Special efforts are made to recruit reviewers from non-academic institutions, minority serving institutions, adjacent disciplines to that principally addressed in the proposal, first time NSF reviewers, etc.

Proposals will be reviewed against the following general merit review criteria established by the National Science Board. Following each criterion are potential considerations that the reviewer may employ in the evaluation. These are suggestions and not all will apply to any given proposal. Each reviewer will be asked to address only those that are relevant to the proposal and for which he/she is qualified to make judgments.

1. **What is the intellectual merit of the proposed activity?**

How important is the proposed activity to advancing knowledge and understanding within its own field and across different fields? How well qualified is the proposer (individual or team) to conduct the project? To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

2. **What are the broader impacts of the proposed activity?**

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

Integration of Research and Education

One of the principal strategies in support of NSF’s goals is to foster integration of research and education through the programs, projects and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learner perspectives. PIs should address this issue in their proposal to provide reviewers with the information necessary to respond fully to both NSF merit review criteria. NSF staff will give it careful consideration in making funding decisions.

Integrating Diversity into NSF Programs, Projects, and Activities

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports. PIs should address this issue in their proposal to provide reviewers with the information necessary to respond fully to both NSF merit review criteria. NSF staff will give it careful consideration in making funding decisions.

B. Review Protocol and Associated Customer Service

Most proposals submitted to the NSF are reviewed by mail review, panel review, or some combination of mail and panel review.

Proposals submitted to this activity will be sent to panelists for evaluation. Panelists will be asked to formulate a recommendation to either support or decline each proposal. A Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation. In most cases, proposers will be contacted by the Program Officer after his or her recommendation to award or decline funding has been approved by the Division Director. This informal notification is not a guarantee of an eventual award. NSF will be able to tell applicants whether their proposals have been declined or recommended for funding within six months for 95 percent of proposals in this category. The time interval begins on the proposal deadline or target date or from the date of receipt, if deadlines or target dates are not used by the program. The interval ends when the Division Director accepts the Program Officer's recommendation.

In all cases, after final programmatic approval has been obtained, the recommendation then goes to the Division of Grants and Agreements for review of business, financial and policy implications and the processing and issuance of grant or other agreement. Proposers are cautioned that only a Grants Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with an NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants Officer does so at its own risk.

GRANT AWARD AND ADMINISTRATION INFORMATION

A. Notification of the Award

Notification of the award is made *to the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator.

B. Grant Award Conditions

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 Project General Terms and

Conditions," depending on the grantee organization. Copies of these documents are available at no cost from the NSF Clearinghouse, P.O. Box 218, Jessup, Maryland 20794-0218, telephone (301) 947-2722, or via e-mail to pubs@nsf.gov. More comprehensive information is contained in the NSF *Grant Policy Manual* (NSF 95-26), available on the NSF OnLine Document System located at <http://www.nsf.gov/>, or for sale through the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

C. Reporting Requirements

For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after expiration of a grant, the PI also is required to submit a final project report. Approximately 30 days before expiration, NSF will send a notice to remind the PI of the requirement to file the final project report. Failure to provide final technical reports delays NSF review and processing of pending proposals for the PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

NSF has implemented a new electronic project reporting system, available through FastLane, which permits electronic submission and updating of project reports, including information on: project participants (individual and organizational); activities and findings; publications; and other specific products and contributions. Reports will continue to be required annually and after the expiration of the grant, but PIs will not need to re-enter information previously provided, either with the proposal or in earlier updates using the electronic system.

Effective October 1, 1998, PIs are required to use the new reporting format for annual and final project reports. PIs are strongly encouraged to submit reports electronically via FastLane. For those PIs who cannot access FastLane, paper copies of the new report formats may be obtained from the NSF Clearinghouse as specified above. NSF expects to require electronic submission of all annual and final project reports via FastLane beginning in October, 1999.

D. New Awardee Information

If the submitting organization has never received an NSF award, it is recommended that the organization's appropriate administrative officials become familiar with the policies and procedures in the NSF *Grant Policy Manual* which are applicable to most NSF awards. The "Prospective New Awardee Guide" (NSF 97-100) includes information on: Administration and Management Information; Accounting System Requirements and Auditing Information; and Payments to Organizations with Awards. This information will assist an organization in preparing

documents that NSF requires to conduct administrative and financial reviews of an organization. The guide also serves as a means of highlighting the accountability requirements associated with Federal awards. This document is available electronically on NSF's Web site at <http://www.nsf.gov/cgi-bin/getpub?nsf97100>.

CONTACTS FOR ADDITIONAL INFORMATION

Questions concerning PEET proposals should be directed to:

Division of Environmental Biology (PEET)
National Science Foundation
4201 Wilson Boulevard, Room 635
Arlington, VA 22230
Telephone: (703) 306-1481
Fax: (703) 306-0367
E-Mail: sysrev@nsf.gov

OTHER PROGRAMS OF INTEREST

The NSF *Guide to Programs* is a compilation of funding opportunities for research and education in science, mathematics, and engineering. General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter. Beginning in fiscal year 1999, the NSF *Guide to Programs* will only be available electronically at <http://www.nsf.gov/cgi-bin/getpub?nsf994>. Many NSF programs offer announcements concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices listed in Appendix A of the *GPG*.

Any changes in NSF's fiscal year program occurring after press time for the *Guide to Programs* will be announced in the E-Bulletin, available electronically on the NSF Web site at <http://www.nsf.gov/home/ebulletin/>. Subscribers can also sign up for NSF's Custom News Service to find out what funding opportunities are available.

Programs related to the PEET Special Competition in the Directorate for Biological Sciences (BIO) include:

1. Division of Environmental Biology (DEB), 703-306-1480, in particular the Biotic Surveys and Inventories Program (NSF 98-158);
2. Division of Biological Infrastructure (DBI), 703-306-1470, in particular the programs Biological Research Collections (NSF 98-126), Database Activities in the Biological Sciences (NSF 96-6), and Postdoctoral Research Fellowships in Biological Informatics (NSF 98-162).

Programs elsewhere in NSF related to PEET include:

1. Division of International Programs (INT), 703-306-1710, in particular the International Opportunities for Scientists and Engineers: Program Announcement (NSF 96-14).
2. LEXEN Special Competition, Life in Extreme Environments (NSF 97-157, under revision), Directorate for Biological Sciences, 703-306-1439.

GENERAL INFORMATION

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Grantees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

NSF welcomes proposals from all qualified scientists, engineers, and educators. The Foundation strongly encourages women, minorities, and persons with disabilities to compete fully in its programs. 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 subjected to discrimination under any program or activity receiving financial assistance from NSF. Some programs may have special requirements that limit eligibility.

Facilitation Awards for Scientists and Engineers with Disabilities (NSF 91-54) provide funding for special assistance or equipment to enable persons with disabilities (investigators and other staff, including student research assistants) to work on NSF-supported projects.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Information Relay Service (FIRS) capabilities that enable individuals with hearing impairments to communicate with the Foundation regarding NSF programs, employment, or general information. TDD may be accessed at (703) 306-0090; FIRS at 1-800-877-8339.

PRIVACY ACT AND PUBLIC BURDEN STATEMENTS

The information requested on proposal forms and project reports is solicited under the authority of the National Science Foundation Act of 1950, as amended. The information on proposal forms will be used in connection with the selection of qualified proposals; project reports submitted by awardees will be used for program evaluation and reporting within the Executive Branch and to Congress. The information requested 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 proposal-review process, award decisions, or the administration of awards; to government contractors, experts, volunteers, and researchers and educators as necessary to complete assigned work; to other government agencies needing information as part of the review process or in order to coordinate programs; and to another Federal agency, court or party in a court or Federal administrative proceeding if the government is a party. Information about Principal Investigators may be added to the Reviewer file and used to select potential candidates to serve as peer reviewers or advisory committee members. See Systems of Records, NSF-50, "Principal Investigator/Proposal File and Associated Records," 63 *Federal Register* 267 (January 5, 1998), and NSF-51, "Reviewer/Proposal File and Associated Records," 63 *Federal Register* 268 (January 5, 1998). Submission of the information is voluntary. Failure to provide full and complete information, however, may reduce the possibility of receiving an award.

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 and any other aspect of this collection of information, including suggestions for reducing this burden, to: Reports Clearance Officer; Information Dissemination Branch, DAS; National Science Foundation; Arlington, VA 22230.

The program described in this announcement is in the category 47.074 (BIO) of the Catalog of Federal Domestic Assistance.

YEAR 2000 REMINDER

In accordance with Important Notice No. 120 dated June 27, 1997, Subject: Year 2000 Computer Problem, NSF awardees are reminded of their responsibility to take appropriate actions to ensure that the NSF activity being supported is not adversely affected by the Year 2000 problem. Potentially affected items include computer systems, databases, and equipment. The National Science Foundation should be notified if an awardee concludes that the Year 2000 will have a significant impact on its ability to carry out an NSF-funded activity. Information concerning Year 2000 activities can be found on the NSF Web site at <http://www.nsf.gov/oirm/y2k/start.htm>.

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(replaces NSF 97-21)
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