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NATIONAL SCIENCE FOUNDATION
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Dear Colleague,

The purpose of this Dear Colleague letter is to provide you with an update of activities within the Astronomy Division, and to highlight several ongoing funding opportunities and proposal preparation requirements. As we described in our last Dear Colleague letter of August 2000, the Astronomy Division made some changes to the way in which we received and processed proposals internally with the aim of ensuring that the individual investigator research grants programs respond effectively to the dynamic research environment in astronomy and astrophysics. These changes have resulted in some evolution in the content of the individual grants programs that we would like to take this opportunity to describe here.

Proposals to the Astronomy and Astrophysics Research Grants (AAG) program arrive at NSF on a common deadline date. Proposals to the Research in Undergraduate Institutions (RUI) program should also be submitted to the AAG program and meet its annual deadline. For FY2003, as previously announced, this deadline is **15 November 2002**, and we expect a similar date in following years. Program Directors collectively examine all proposals and organize them into natural groupings by topic which become individual review panels. Panels are designed to provide the best, most appropriate review for similar proposals or for proposals that rely on a particular reviewer expertise. As a result, panels may span several program areas, unified by themes of approach (e.g. star formation from local to high redshift environments), technique (e.g. theory of magnetohydrodynamics on all scales), or topic (e.g. stellar populations or observational cosmology). Once defined, panels are then placed in a program (either Extragalactic Astronomy and Cosmology (EXC), Galactic Astronomy (GAL), Stellar Astronomy and Astrophysics (SAA), or Planetary Astronomy (PLA)) for administrative purposes, and overseen by a program director who coordinates the review and serves as primary contact for the PI. As a result, a panel that spans astronomical scales may not seem to fit naturally into one of the old program names, although all of its proposals will be closely related.

Under this new procedure, as anticipated, we have seen a shift in the definition of the traditional program areas. The evolution of observational capability and theoretical tools has shifted the boundaries of subjects and our assignment of panels to programs has followed this migration. For example, the detailed studies of stellar populations in the field and in star clusters has moved beyond the Milky Way and its companion galaxies to encompass the local group and beyond. Studies of individual nearby galaxies can now approach the depth of analysis once reserved for the Milky Way or Magellanic Clouds. Consequently, the panels treating nearby galaxies have been administered this past year in the Galactic Astronomy program, while the Extragalactic Astronomy and Cosmology program has continued to see a growth in number of proposals looking at high redshift objects, large scale structure, and cosmology. This shift of nearby galaxy proposals into Galactic Astronomy also maintains a reasonable balance in number of proposals between individual programs. We expect to see further evolution of subject areas as the definition and assignment of panels follows the changing field.

The median award in the research programs in the Astronomy Division is approximately $80K per year for 3 years, with a large range about this number. However, we realize that not all programs can be supported on this amount, and conversely, that not every investigator needs an award of this size to maintain a research program. We urge PI's to request support at the level and for the duration needed for the proposed project. If you need core support to sustain your research program at a modest level over an extended period, we encourage you to request it. Proposals for modest amounts of funding will be evaluated like all other proposals, on the basis of the two merit review criteria, but program directors often have more flexibility in accommodating smaller requests within their program budgets. The Division recognizes the importance of these sustaining grants and expects that some proposals of this nature will be funded each year, depending on the number and merit of the requests.

Supplements to grants for special purposes

Those investigators with current NSF grants are urged to consider requesting supplemental funding to their award to support special programs such as Research Experiences for Undergraduates (REU) and Research Opportunity Awards (ROA). We sometimes receive inquiries from PI's asking if we have a program to support supplements to research grants for other kinds of educational and outreach activities. Although the Astronomy Division does not have a special targeted program for these activities, we are happy to consider such requests. PI's may submit modest supplemental requests for special activities that broaden the impact of their research, for example, by including K-12 teachers in their research activities or engaging in educational and outreach activities to the public or local schools. Under special circumstances, small supplement requests can be used to ensure adequate completion of the original scope of work or to support critical unforeseen expenditures. As with all requests for supplemental funds, PI's should contact the program director before submitting any requests.

Merit review criteria – the importance of Criterion 2

We would also like to alert you to recent changes in requirements for proposal submission and the need to address both National Science Board review criteria when you prepare your proposals. Since 1997, proposals to NSF have been reviewed on the basis of two review criteria - the intellectual merit of the proposed activity and the broader impact resulting from the proposed activity. However, the January 2002 issuance of the Grant Proposal Guide (http://www.nsf.gov/pubsys/ods/getpub.cfm?gpg) now specifies that principal investigators must address each of these two review criteria in separate statements within the one-page Project Summary and within the body of the Project Description of their proposals. Beginning October 1, 2002, NSF will return without review proposals that do not separately address both merit review criteria in the Project Summary. Reviewers will be asked to comment on both criteria, and program directors are required to address both in their analyses and recommendations.

There are many ways in which fundamental astronomical research has broad impact either through the education of students or the public, through the wide dissemination of data and research results, or through the enhancement of infrastructure. Many of the activities encompassed in NSF's concept of broad impact are already an integral part of your research and educational activities. The new guidelines now require that they be described explicitly in proposals. Examples of the kinds of activities that demonstrate broader impacts are available at: http://www.nsf.gov/pubs/2002/nsf022/bicexamples.pdf

Through these opportunities and the continuing evolution of the research grants programs, we anticipate funding the most meritorious projects across the broad and dynamic fields of astronomy and astrophysics. We look forward to seeing your proposals.

G. Wayne Van Citters
Director
Division of Astronomical Sciences

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 (unless otherwise specified in the eligibility requirements for a particular program).

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-supported projects. See the program announcement or contact the program coordinator at (703) 292-6865.

The National Science Foundation has Telephonic Device for the Deaf (TDD) and Federal Relay Service (FRS) 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) 292-5090 or (800) 282-8749 or through FRS on 1-800-877-8339.

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