

**National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230**

DEAR COLLEAGUE LETTER

MPS Internships in Public Science Education (IPSE) Program

Program Solicitation [NSF 01-39]

Dear Colleague:

Few things are more important to the future of science and engineering in the United States than illustrating for the public at large the value of a strong US effort in these areas. Indeed, NSF Director Dr. Rita Colwell has stated that “there is no group of people who should feel more responsible for science and math education in this nation than our scientists and scientists-to-be.” In order to promote the involvement of the research community in public educational activities, NSF's Directorate for Mathematical and Physical Sciences (MPS) announces the MPS Internships in Public Science Education (IPSE) program. IPSE is intended to bring the most recent science research results from MPS disciplines to the public by promoting partnerships between the MPS research community and professionals in public science education.

By its very nature, public science education is intended to reach far beyond the boundaries of the universities, colleges, and research centers where the research is carried out, and to bring to the public a broader awareness of science and its most exciting results. The importance of this work was nicely illustrated by the remarks of House Committee on Science, which wrote in its 1998 *Report to Congress* that “Each member of society plays a part in the scientific enterprise ... we should all possess some degree of knowledge about, or familiarity with, science and technology if we are to exercise our individual roles effectively.” Science centers and museums play an important role in informing and educating society by providing an effective mechanism that brings current, accurate, and compelling scientific concepts and discoveries to the public.

The structure of the program is patterned after two other activities that have been widely and successfully used in MPS disciplines - the *Research Experiences for Undergraduates* and the *Research Experiences for Teachers* programs. The IPSE activity will provide support for undergraduate and graduate students and K-12 teachers to work in conjunction with MPS research scientists, and with professionals at science centers and museums, on projects in public science education. (The term "Science Centers" includes, but is not limited to, visitors' centers associated with MPS-supported facilities.) Here are some intended emphases:

- For students and teachers the activity is intended to provide valuable training by establishing a close working relationship with scientists and with professionals in public science education.
- For undergraduate and graduate students considering careers in science and/or in education, this opportunity is intended to provide experience with activities that will be important in their future. The intention is to provide a solid basis for understanding the process and concepts of science and the experience of communicating them to the public.

- For K-12 teachers, the activity is intended to provide valuable experience that will enrich their classroom environment.
- For science centers and museums, the activity is intended to provide the opportunity to collaborate with talented interns and research scientists who bring new skills and ideas to the development of museum programming and exhibits.
- For faculty and researchers in the MPS disciplines, the activity provides opportunities to bring their latest scientific research results to the public and to gain experience in effective public outreach and education.

IPSE is intended to encourage effective partnerships between the MPS research community and science centers and museums. Therefore, proposals should show evidence of active collaborative planning among all the institutions and individuals involved. Proposals will be accepted from individuals or groups of faculty members at universities and colleges working with a local science center or museum, from a science center or museum working with departments at a university or college, or from MPS-supported research centers, facilities, or institutes with an outreach or educational program.

IPSE activities should be designed to increase the museum or science center's effectiveness in outreach and science education through specific projects or exhibits that bring new scientific ideas to museum programming. Examples might include, but are not limited to, the development of new or expanded exhibits, creation of programs such as museum shows and public lectures, or development of specific curricular activities for K-12 teachers or students. In all cases, the projects proposed should demonstrate the active involvement of both research scientists and science center or museum staff in the planning and execution of the project. Because informal science education is intended to reach a broad public, and the development of exhibits and programming involves the skills and talents of many people, IPSE is open to students and teachers of all disciplines, including art, writing, museum studies, education, history, as well as science and mathematics. The involvement of minority-serving institutions and the development of projects that serve diverse populations are encouraged.

The IPSE program will support projects with durations of up to 3 years. We anticipate that a total of up to \$1 million will be available for 8 to 10 new awards in fiscal year 2001, subject to the number and quality of proposals received. The deadline for submission of proposals is 2 April 2001.

Details of the IPSE program and guidelines for proposal submission are available in the Program Solicitation (NSF 01-39). We strongly encourage your participation in this opportunity to communicate the excitement, value, and importance of science to the public. We look forward to seeing your most creative ideas and to working with you to realize them.

Sincerely,

Robert A. Eisenstein
Assistant Director, MPS

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