

Dear Colleague:

The next International Polar Year (IPY) will occur from March 2007 through March 2009. IPY is envisioned as an intense scientific campaign to explore new frontiers in polar science, improve our understanding of the critical role of the polar regions in global processes, and increase public understanding of polar science. This Dear Colleague letter provides information on anticipated FY-07 National Science Foundation (NSF) funding opportunities for IPY research and education activities that have been identified to date. These opportunities will be supported through a special IPY Solicitation with focused science and education themes, and through ongoing program activities at NSF. The special IPY Solicitation and the ongoing NSF programs that will support other IPY activities are described below. Additional information can be found at www.nsf.gov/od/opp/ipy/ipyinfo.jsp.

The U.S. National Committee for IPY, formed under the auspices of the National Academy of Sciences, has published a vision document "A Vision for the International Polar Year 2007-2008", which is available at <u>http://www.us-ipy.org/</u>. The International Council for Science-World Meteorological Organization (ICSU-WMO) Joint Committee published an additional planning framework and is facilitating international cooperation through an International Programme Office in Cambridge, England. Further information on international efforts and the history of the IPY is available at <u>http://www.ipy.org</u>. The U.S. Office of Science and Technology Policy designated NSF as the lead federal agency for U.S. IPY activities. The NSF Director hosted several interagency planning meetings to elicit the agencies' preliminary plans for IPY. These are summarized at <u>http://nsf.gov/pubs/2005/nsf0545/nsf0545_3.pdf</u>.

Desirable characteristics and goals of IPY projects include those that: involve a pulse of activity during the IPY period; are interdisciplinary in scope; leave a legacy of infrastructure and data; expand international cooperation; engage the public in polar discovery; and help attract the next generation of scientists and engineers. In particular, proposals for IPY activities should focus on the polar regions, and where possible and appropriate, should develop and expand international partnerships and cooperation.

Priority will be given to proposals that take integrative or interdisciplinary approaches and forge collaborations among traditionally separate disciplines. Collaborations with researchers and educators who have not previously been involved in polar research are strongly encouraged. Such proposals will leave a legacy by promoting and stimulating new collaborations designed to further our understanding of fundamental questions in polar science, including interactions of human communities with the environment. As an important contribution to the IPY legacy, data management is expected to be an integral part of all proposals, although standalone data management proposals will also be considered. All proposals should include an explicit discussion of plans for data management and data sharing.

NSF FY '07 International Polar Year Solicitation:

The National Science Foundation is planning a special joint solicitation for IPY proposals to support specific research and education activities within the following emphasis areas:

• Understanding Environmental Change in Polar Regions

Research that advances understanding of the drivers of environmental change at the poles, including physical, geological, chemical, human and biological processes, and their interactions with ecosystems and the climate system.

• Human and Biotic Systems in the Polar Regions

Research that addresses fundamental questions about social, behavioral, and/or natural systems that will increase our understanding of how humans and other organisms function in the extreme environments of the polar regions.

• Education and Outreach

Educational activities that specifically invigorate science, technology, engineering, and mathematics (STEM) education in the context of IPY: formal science education projects at the K-12, undergraduate, or graduate level; informal science education projects for the broader public; and coordination and communication for IPY education projects.

Scientists from numerous countries are engaged in IPY research. International efforts during IPY present opportunities for collaboration with foreign scientists in the development of interdisciplinary projects that could lead to important advances in scientific understanding of the polar regions and enhance our ability to conduct research in these extreme environments. Collaboration and participation of U.S. organizations in foreign-led efforts within the emphasis areas are strongly encouraged, as is participation of non-U.S. scientists in proposals supported under this IPY Solicitation. Therefore, researchers and educators who are planning on submitting proposals are encouraged to begin exploring possibilities for international collaborations as soon as it is feasible. Please note that awards made through this program will support U.S.-based institutions. Collaborators from institutions outside the U.S. must seek funding from their respective funding organizations.

NSF Ongoing Program Activities in Support of IPY:

Researchers and educators who anticipate proposing IPY projects that are not relevant to the thematic areas described above should consider submitting proposals to an ongoing NSF program. IPY proposals should meet the goals and priorities of the ongoing program. If there is uncertainty about whether an IPY proposal is relevant to the ongoing program, proposers should consult the cognizant program officers before submission. Biological Sciences (BIO), Geosciences (GEO), Office of International Science and Engineering (OISE), Office of Polar Programs (OPP), and Social, Behavioral and Economic Sciences (SBE) encourage the submission of IPY proposals to their ongoing programs. The specific programs within these Directorates and their cognizant program officers are listed on the special IPY web page at www.nsf.gov/od/opp/ipy/ipyinfo.jsp. This web site will be updated as new opportunities for IPY are identified within NSF. IPY proposals are expected to help implement the vision developed by and articulated in the NAS document, "A Vision for the International Polar Year 2007-2008" (http://www.us-ipy.org/).