Directorate of Mathematical and Physical Sciences
Division of Materials Research (DMR)
Advice to PIs on Data Management Plans

NSF has published a revised version of the NSF Proposal and Award Policies and Procedures Guide (PAPPG) (NSF 11-1) that will require, in all proposals submitted , or due, on or after January 18, 2011, a supplementary document of no more than two pages describing a Data Management Plan for the proposed research. Fastlane will not permit submission of a proposal that is missing the Data Management Plan. The Data Management Plan will be reviewed as part of the intellectual merit or broader impacts of the proposal, or both, as appropriate. The goal is to provide clear, effective, and transparent implementation of the long-standing NSF Policy on Dissemination and Sharing of Research Results, which may be found in the [Award Administration Guide, Section VI.D.4](#). This policy states:

a. Investigators are expected to promptly prepare and submit for publication, with authorship that accurately reflects the contributions of those involved, all significant findings from work conducted under NSF grants. Grantees are expected to permit and encourage such publication by those actually performing that work, unless a grantee intends to publish or disseminate such findings itself.

b. Investigators are expected to share with other researchers, at no more than incremental cost and within a reasonable time, the primary data, samples, physical collections and other supporting materials created or gathered in the course of work under NSF grants. Grantees are expected to encourage and facilitate such sharing. Privileged or confidential information should be released only in a form that protects the privacy of individuals and subjects involved. General adjustments and, where essential, exceptions to this sharing expectation may be specified by the funding NSF Program or Division/Office for a particular field or discipline to safeguard the rights of individuals and subjects, the validity of results, or the integrity of collections or to accommodate the legitimate interest of investigators. A grantee or investigator also may request a particular adjustment or exception from the cognizant NSF Program Officer.

c. Investigators and grantees are encouraged to share software and inventions created under the grant or otherwise make them or their products widely available and usable.

d. NSF normally allows grantees to retain principal legal rights to intellectual property developed under NSF grants to provide incentives for development and dissemination of inventions, software and publications that can enhance their usefulness, accessibility and upkeep. Such incentives do not, however, reduce the responsibility that investigators and organizations have as members of the scientific and engineering community, to make results, data and collections available to other researchers.

e. NSF program management will implement these policies for dissemination and sharing of research results, in ways appropriate to field and circumstances, through the proposal review process; through award negotiations and conditions; and through appropriate support and incentives for data cleanup, documentation, dissemination, storage and the like.

MPS-supported research covers a broad spectrum of communities of investigators, from individual investigators on experimental and theoretical topics to support for users at national and international facilities to large national and international collaborations of investigators involving tens or hundreds of individuals.

MPS Divisions will rely heavily on the merit review process in this initial phase to determine those types of plan that best serve each community and update the information accordingly.

The Division of Materials Research will rely on the process of peer review to allow the broad materials' community to identify best practices. Due to the diverse communities supported by DMR, the Division is not in a position to recommend a Division-specific single data sharing and archiving approach.

DMR PIs should include in their Data Management Plan those aspects of data retention and sharing that would allow them to respond to a question about a published result. Members of formal collaborations may refer to the collaboration's existing policies and practices.