

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

January 2, 2018

The NSF Proposal and Award Policies and Procedures Guide (PAPPG) requires, in all proposals submitted, 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 [Proposal and Award Policies and Procedures Guide \(PAPPG\) XI.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 a way appropriate to field and circumstances, through the proposal review

process; through award negotiations and grant conditions; and through appropriate support and incentives for data cleanup, documentation, dissemination, storage and the like.

f. Each NSF grant contains, as part of the grant terms and conditions, an article implementing dissemination and sharing of research results.

For many proposals to DMS, a statement that no data management plan is necessary will suffice, provided that a clear justification for this claim is given. All principal investigators should consult the *Proposal and Award Policies and Procedures Guide* (PAPPG) for points to be addressed in a data management plan and its inclusion within a proposal.

Many of the proposals to DMS that require significant data management plans will be interdisciplinary submissions that involve the mathematical sciences and research topics, data, or collaborators from one or more other disciplines. In such cases DMS expects principal investigators to address the customary data practices of partner disciplines in their proposals' data management plans, and reviewers are likely to be asked to comment on the suitability of those plans from the perspectives of the relevant disciplines. Principal investigators may find it useful to consult statements on data management plans from other divisions and directorates of NSF in the preparation of interdisciplinary proposals.