Data Management and Sharing

Information adapted from:

- NSF 17-1 January 30, 2017, Chapter II.C.2.j Proposal Preparation Instructions
- NIH Data Sharing Policy (October 2003)

Boilerplate Text to be Adapted for Inclusion in Proposals

Investigators will promptly prepare and submit for publication, with authorship that accurately reflects the contributions of those involved, all significant findings from work conducted. Investigators will 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.

Privileged or confidential information will 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 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. Investigators will share software and inventions created under the grant or otherwise make them or their products widely available and usable.

Categories of Data Sharing Information and Policies to be Addressed by a Proposal

- 1) Data sharing policies apply to:
 - a) Human subjects
 - b) Laboratory research
 - c) Other types of research
- 2) Sources of data:
 - a) Basic research
 - b) Clinical studies
 - c) Surveys
 - d) Other sources of data
- 3) Types of data:
 - a) Results
 - b) Samples
 - c) Physical collections
 - d) Software
 - e) Curriculum materials
 - f) Meeting minutes and/or transcripts
 - g) Other materials to be produced in the course of the project
- 4) Schedule for sharing data
- 5) Standards to be used for data and metadata format and content
- 6) Methods for sharing data:
 - a) Publishing: articles in scientific publications
 - b) Researcher's efforts: investigator responds directly to data requests
 - c) Data enclave: controlled, secure environment in which eligible researchers can perform analyses using data resources
 - d) Data archive: place where machine-readable data are acquired, manipulated, documented and distributed

- e) Mixed mode: more than one version of a dataset, each providing a different level of access
- 7) Policies for access and sharing, including:
 - a) Provisions for appropriate protection of privacy
 - i) Removing identifiers
 - ii) Restricting the transfer of data to others
 - iii) Requiring that the data be used only for research purposes
 - iv) Adhering to restrictions from local, State, and Federal privacy laws
 - b) Confidentiality
 - c) Security
 - d) Intellectual property
 - e) Other rights or requirements
- 8) Policies and provisions for re-use, re-distribution, and the production of derivatives
- 9) Plans for archiving data, samples, and other research products, and for preservation of access to them

Data Management and Sharing of the Products of Research

From NSF Site: <u>https://www.nsf.gov/pubs/policydocs/pappg17_1/pappg_2.jsp#IIC2j</u>

NSF proposals must include a document of no more than two pages uploaded under "Data Management Plan" in the supplementary documentation section of FastLane. This supplementary document should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results (see <u>Chapter XI.D.4</u>), and may include:

- 1. the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project;
- the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies);
- 3. policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements;
- 4. policies and provisions for re-use, re-distribution, and the production of derivatives; and
- 5. plans for archiving data, samples, and other research products, and for preservation of access to them.

Data management requirements and plans specific to the Directorate, Office, Division, Program, or other NSF unit, relevant to a proposal are available at:

<u>http://www.nsf.gov/bfa/dias/policy/dmp.jsp</u>. If guidance specific to the program is not available, then the requirements established in this section apply.

Simultaneously submitted collaborative proposals and proposals that include subawards are a single unified project and should include only one supplemental combined Data Management Plan, regardless of the number of non-lead collaborative proposals or subawards included.

A valid Data Management Plan may include only the statement that no detailed plan is needed, as long as the statement is accompanied by a clear justification. Proposers who feel that the plan cannot fit within the limit of two pages may use part of the 15-page Project Description for additional data management information. Proposers are advised that the Data Management Plan must not be used to circumvent the 15-page Project Description limitation. The Data Management Plan will be reviewed as an integral part of the proposal, considered under Intellectual Merit or Broader Impacts or both, as appropriate for the scientific community of relevance.

From NIH site: https://grants.nih.gov/grants/policy/data_sharing/

NIH reaffirms its support for the concept of data sharing. We believe that data sharing is essential for expedited translation of research results into knowledge, products, and procedures to improve human health. The NIH endorses the sharing of final research data to serve these and other important scientific goals. The NIH expects and

supports the timely release and sharing of final research data from NIH-supported studies for use by other researchers. Starting with the October 1, 2003 receipt date, investigators submitting an NIH application seeking \$500,000 or more in direct costs in any single year are expected to include a plan for data sharing or state why data sharing is not possible.

Applicants are encouraged to discuss their data sharing plan with their program contact at the time they negotiate an agreement with the Institute/Center (IC) staff to

accept assignment of their application as described at https://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-004.html. Instructions related to the data sharing policy as it is applied to applications and proposals responding to a specific Request for Application (RFA) or Request for

Proposals (RFP) will be described in the specific solicitation. In some cases, Program Announcements (PA) may request data sharing plans for applications that are less than \$500,000 direct costs in any single year. Reviewers will not factor the proposed data-sharing plan into the determination of scientific merit or priority score. Program staff will be responsible for overseeing the data sharing policy and for assessing the appropriateness and adequacy of the proposed data-sharing plan.

NIH recognizes that data sharing may be complicated or limited, in some cases, by institutional policies, local IRB rules, as well as local, state and Federal laws and regulations, including the Privacy Rule. As NIH stated in the March 1, 2002 draft data sharing statement (<u>https://grants.nih.gov/grants/guide/notice-files/NOT-OD-02-035.html</u>), the rights and privacy of people who participate in NIH-sponsored research must be protected at all times. Thus, data intended for broader use should be free of identifiers that would permit linkages to individual research participants and variables that could lead to

deductive disclosure of the identity of individual subjects. When data sharing is limited, applicants should explain such limitations in their data sharing plans.

For more information on data sharing, please see : https://grants.nih.gov/grants/policy/data_sharing/.