Data and Metadata

Types of primary data, samples, physical collections, software, curriculum materials, etc., (e.g., digital numeric data, photographs, video, acoustic records, database tables, spreadsheets, paper records, physical samples, etc.), which are produced during the project; necessary data flow, and produces the data entry/tracking plan.

What metadata the proposed research will generate and how the metadata will be captured and structured (e.g., in Word document, tab on data spreadsheet).

Tools, e.g., a template that will be employed to capture metadata consistently through the search.

The metadata standard(s) or formats to be used or considered to represent data and metadata elements in the data collection, including any modifications of the standard(s).

The volume of data that is anticipated to be collected and growth to help understand the amount of digital storage space required during the course of the research.

Data Storage and Access

The anticipated time frame of the research effort in relation to the duration when digital storage space will be required.

Indicate how the scientific data will be made discoverable and whether a persistent unique identifier or other standard indexing tools will be used, and whether the data contain Personally Identifiable Information or any information whose distribution may be restricted by law or national security.

Indicate whether scientific data generated from humans or human biospecimens will be available through unrestricted (made publicly available to anyone) or restricted access (made available after the requestor has received approval to use the requested scientific data for a particular project or projects). If the scientific data will be shared through a restricted access mechanism, describe the terms of access for the data.

If applicable, any documentation on specific terminology or guidance on valid values (e.g., “t” = time), and include or reference that documentation.

Where and how the data will be stored initially (i.e., prior to being sent to a long-term archive facility), such as the use of data repositories.

The minimum preservation time afforded by the proposed budget.

Describe any future decision points regarding continued preservation, archiving, or retiring the data.

Data Quality and Security

Describe any provisions for maintaining the security and integrity of the scientific data (e.g., encryption and backups, how the data will be protected from accidental or malicious modification or deletion, including data back-up, disaster recovery/contingency planning, and off-site storage relevant to the data collection).

The quality control procedures, and the overall lifecycle of the data from collection or acquisition to making it available to the public and other researchers.

The plan for addressing the study participants’ consent process to enable the de-identified data to be shared broadly for future research.

The copyright and the intellectual property rights of the data. If applicable, indicate how intellectual property, including invention or other proprietary rights, will be managed in a way to maximize sharing of scientific data. Include any information relevant to the intellectual property rights associated with the scientific data, such as whether the intellectual property stems from an existing agreement or is anticipated to arise from the proposed research project itself.

Data Management and Oversight
An estimated cost to implement the data management plan. This cost is allowable as part of the grant award direct costs or contract award price. Any costs associated with implementing the DMP should be explained in the Budget Justification.

Address the roles and responsibilities of all parties with respect to the management of the data (including contingency plans for the departure of key personnel from the project) after the grant or research contract ends.

Explain how the recipient plans to manage and disseminate data generated by the project.

Describe how you will check for adherence to this DMP. Indicate the party responsible for managing the data.

### Data Use and Considerations

If data will not be available to the public, describe why data will be closed or limited. Note any ethical or legal reasons for limited public access.

Describe any existing data sharing agreement(s), outlining the responsibilities of each party, as well as how scientific data can and cannot be used.

Describe any existing general licensing terms, and any limitations on the scientific data use and reuse based on these terms. Describe whether the licensing is imposed by the applicant institution or whether it comes from any existing agreement(s).

Describe alternative plans for maintaining, preserving, and providing access to scientific data should the original Plan not be achieved.

Other Considerations: Indicate whether additional considerations are needed to preserve and make accessible implement the scientific data. Plan (e.g., prior permission to use a specific repository