Template for the NSF Data Management Plan - Biological Sciences Directorate

Consult the solicitation and the guidance from the cognizant NSF directorate *before* preparing your data management plan, which NSF limits to two pages in length. Consider including information on the following points when writing your plan.

I. Types of Data - Describe the types of data and products that will be generated in the research, for example molecular or genetic data, anatomical or physiological data; images, acoustical or video recordings, data tables and compilations of numeric data.

1. What data will be generated in the research ? What standards and controls will be employed?
2. What data types will you be creating or capturing? (e.g. experimental measures, observational or qualitative, model simulation, processed, samples, non-digital)
3. How will you capture or create the data? May include instrumentation, hardware or software used.
4. Will your data be collected in a laboratory or in the field? (If in a field study, please supply location of study, time in field and any other relevant details.)

II. Data Storage and Preservation – Describe plans for archiving data, samples, and other research products, and for preservation of access to them.

1. What is the period of data retention? How long will/ should data be kept beyond the life of the project?
2. Are software or tools needed to access the data and will these be archived?
3. Will hardcopy notebooks, group computer files, media recordings, instrument outputs, and physical samples be stored?
4. Which archive/repository/central database/ data center have you identified as a place to deposit data?
5. Does your intended long-term data storage facility have procedures in place for data preservation and backup? Describe the procedures.
6. How will compliance with this plan be managed? Who will be responsible for data management in the research project?

III. Data and Metadata Formats– Describe 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)

1. Explain the format of your data, and how that format will remain useable and accessible over time. If you are using a community resource, such as GENBANK as archive, provide links to the resource.
2. Employing existing metadata standards will help secure the longevity of your data. Think about what information "interested parties outside of your laboratory" would need to use your data if you are unable to find standardized metadata guidelines that are appropriate to your field of study.

IV. Access to Data and Data Sharing Practices and Policies

1. How and when will you make the data available?
2. Do you plan on publishing findings which rely on the data? If so, do your prospective publishers place any restrictions on other avenues of publication?
3. Explain details of any embargo periods for political/commercial/patent or publisher reasons.
4. How long will the original data collector/creator/principal investigator retain the right to use the data before opening it up to wider use?
5. Are there ethical or privacy issues? If so, how will these be resolved?
6. What and who are the intended or foreseeable uses/users of the data?

V. Roles and Responsibilities

1. How will compliance with this plan be managed?

VI. If a grant is funded for a collaborative group of labs, state that the lead P.I. is responsible for the data management arrangements.