Shimane University
Research Data Preservation and Management Guide

The Guidelines for Research Data Preservation at Shimane University (Approved by the Trustee (academic research and industrial innovation) on April/1/2020) stipulates that research data that form the grounds of the published research discovery must be appropriately preserved so that it can be used and verified at a later date.

Examples of appropriate methods for research data management will be presented in this guide. These examples should be used as a reference for the storage of data using methods appropriate to each field of specialization, so that it can be coherently understood by third parties.

1. Data Storage Methods

In case that doubts arise concerning the published research discovery **including research papers and reports,** the data on which the findings are based need to be verified. Thus, data used for the research papers, etc. should be preserved so that it can be referenced immediately.

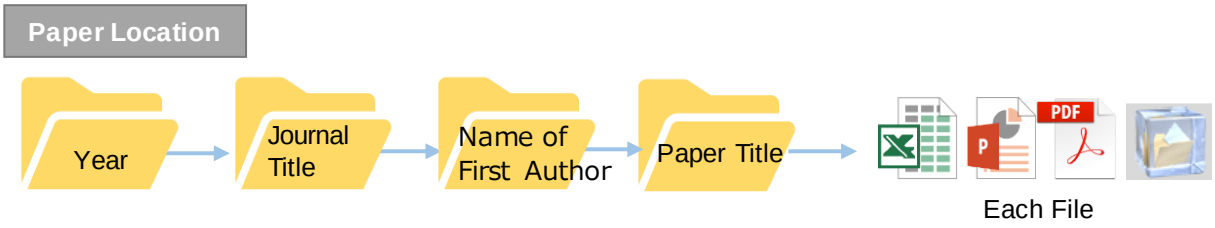
- After research findings are presented, the manuscript, etc. and all original data files shall be preserved. This includes not only data that was processed for the publication or presentation but also the original data.

- The process of data preservation and the allocation of data to a digital or physical location shall be recorded in the "Research Data Preservation and Management Records." In addition, the data retention period and the retention period expiration date should be determined in advance and recorded.

Data Retention Period

- **As a rule, the retention period for data (documents, numerical data, images, etc.) is ten years after the publication of the research paper, etc.**
  Although it is advisable for materials in print form to also be preserved for at least ten years, it may be disposed of within reasonable limits if the shortage of storage space arises.
- **As a rule, "objects" including samples and equipment shall be stored for five years after the publication of the research paper, etc.**
  However, this shall not apply to objects that are difficult to preserve or store (e.g., unstable substances, materials that are expended or consumed as a part of the experiment itself, rented/leased articles) and objects for which storage would incur a significant cost (e.g., biological samples).

File and Folder Classification Rules (example)



- If the size of the original data is very large, the file on which the location of the preserved original data is recorded shall be preserved in the place of the original data.
- For experimental, analysis, and survey data, the "person who acquired the data," "experimental (survey) method," "data name," and "data acquisition date" should be made clear in the folder and file names so it can be ascertained easily by third parties.

2. Storage Location Specifics

- The data should be managed by the research group as a whole (or an appropriate organizational unit), or by the individual researcher. It should be stored on a data storage hard drive, CD, DVD, etc. Moreover, the process of data preservation should be noted by the administrative division of each faculty/school.
- The data should be kept in one place and centralized, in other words, it should be kept on one hard drive or in one cabinet as much as possible.
- If the research data includes personal information, it should be stored in a locked room such as a private laboratory so that it cannot be seen by a third party. For digital data, close attention must be paid to the security of the computer where the data are stored and the storage medium.

3. Other Considerations

- If a faculty member leaves the university due to a transfer, mandatory retirement, or a resignation, the research data should be transferred to a new location. Information regarding the person taking over the research and the new data storage location must be entered into the Research Data Preservation and Management Records.
- There are no prescribed rules regarding how the data are to be backed up or the equipment renewed, but this should be carried out in an appropriate fashion by each research group, etc.