

1. Data Availability Statements:

- Authors should include a clear and comprehensive data availability statement in their manuscript, indicating whether and how the data supporting their findings are accessible to others.
- The data availability statement should specify the location (e.g., repository name and URL) where the data can be accessed, any restrictions on access (if applicable), and instructions for obtaining access to the data.
- Even if the data are not shared openly, authors should provide transparency by stating the reasons for data unavailability and explaining any restrictions or limitations on data access.

2. Deposition in Public Repositories:

- Authors are encouraged to deposit their research data in public repositories or data archives that specialize in hosting and curating scientific datasets.
- Choose a reputable repository that aligns with the nature of the data and the requirements of the research field. Examples include disciplinary repositories (e.g., GenBank for genomic data) and generalist repositories (e.g., Zenodo, Figshare).
- Ensure that the chosen repository provides persistent identifiers (such as DOIs) for datasets, facilitating citation and attribution in scholarly publications.

3. Compliance with Data Sharing Policies:

- Familiarize yourself with the data sharing policies of funding agencies, institutions, and publishers relevant to your research. Many funding bodies and journals require or strongly encourage authors to share their research data as a condition of funding or publication.
- Ensure compliance with any specific requirements or mandates regarding data sharing, including deadlines for data deposition and documentation of data management and sharing practices.
- If your research involves human subjects, sensitive data, or proprietary information, consult applicable ethical guidelines and legal regulations to determine appropriate data sharing practices while protecting participant privacy and confidentiality.

4. Prepare Data for Sharing:

- Before depositing data in a repository, ensure that the data are well-organized, documented, and formatted according to community standards and best practices.
- Provide metadata, data descriptors, and accompanying documentation (such as codebooks, data dictionaries, and readme files) to enhance the usability and interpretability of the data.
- Consider anonymizing or de-identifying sensitive or personally identifiable information in accordance with data protection regulations and ethical guidelines.

5. Promote Discoverability and Accessibility:

- Optimize the discoverability and accessibility of shared data by providing descriptive titles, keywords, and metadata that facilitate search and retrieval.
- Consider assigning appropriate licenses (such as Creative Commons licenses) to clarify the terms of use and reuse of the data, promoting openness and collaboration.
- Include links or references to deposited datasets in your manuscript, supplementary materials, and data availability statement to direct readers to the relevant resources.

6. Maintain Long-Term Accessibility:

- Ensure the long-term preservation and accessibility of shared data by choosing reputable repositories with robust data management and preservation practices.
- Periodically review and update data deposition records to address changes in data access, metadata, or associated publications.

By following these guidelines on data sharing practices, authors can enhance the transparency, reproducibility, and impact of their research, contributing to a culture of openness and collaboration in the scientific community.