

# Data Management Plans

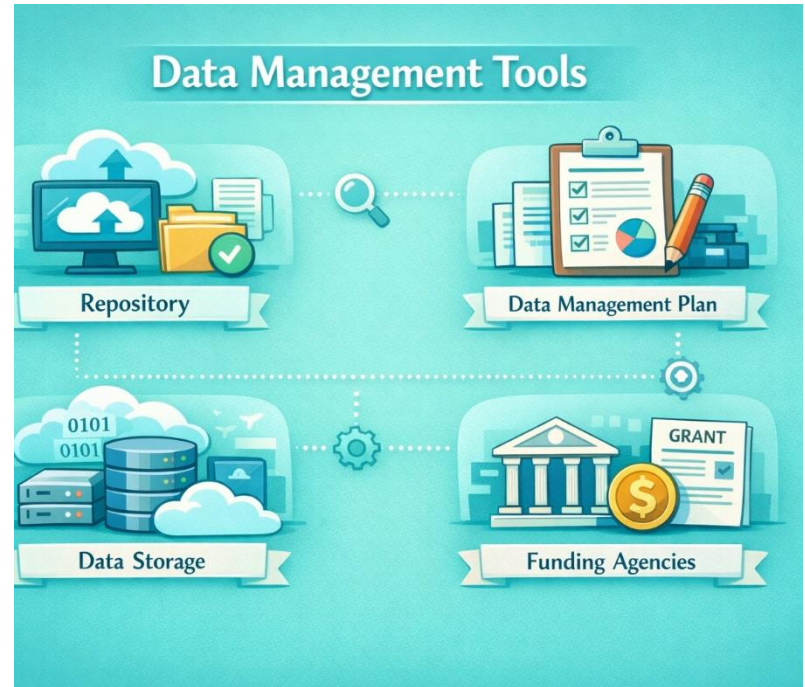


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Dr.<sup>in</sup> Judith Köbler

FSI Academy 05.05.2026

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# Why Research Data Management?

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Organize and manage research data

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Ensuring quality, safety, and reproducibility

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Adherence to FAIR Principles

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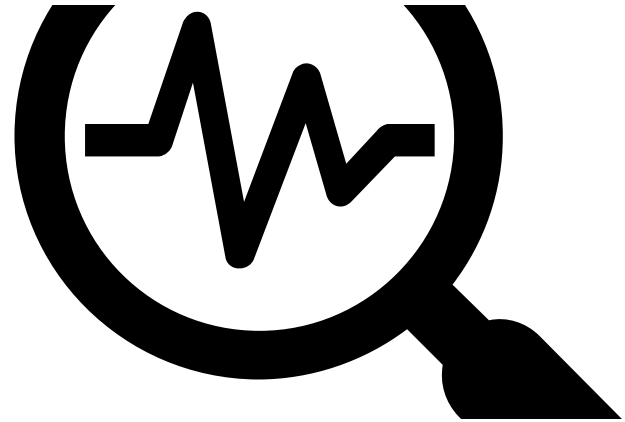
**Conclusion:** Research data management should be designed in such a way that data can be accessed and analysed independently of the data producer.

# FAIR Principles



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- **Findable:** The data is provided with a globally unique and permanent identifier, along with comprehensive metadata.
- **Accessible:** Long-term access to research data should be ensured. Long-term access to research data should be ensured.
- **Interoperable:** When shared, research data should be able to be interpreted (semi-) automatically and combined with other datasets.
- **Reusable:** Metadata accompanied by supplementary documentation provides a detailed description and a clear license for use.



# MUI Research Data Policy



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## § 5 Verantwortlichkeiten

Die Verantwortung zur Umsetzung der Vorgaben gegenständlicher Richtlinie liegt sowohl bei den Datenverwenderinnen/Datenverwendern als auch bei der MUI.

(1) Verantwortlichkeiten der Datenverwenderinnen/Datenverwender:

Die Verantwortung für das Forschungsdatenmanagement vor, während und nach einer Forschungstätigkeit liegt bei den Datenverwenderinnen/Datenverwendern, wobei jedenfalls folgende Aufgaben in den Zuständigkeitsbereich der Datenverwenderinnen/Datenverwender fallen:

- a) Erstellung eines entsprechenden Datenmanagementplanes.
- b) Sammlung, Dokumentation, Speicherung, allfällige Gewährleistung des Zugriffs bzw. Bereitstellung, Aufbewahrung, Archivierung oder ggf. Löschung der Forschungsdaten.
- c) Berücksichtigung, Sicherstellung und Erfüllung aller organisatorischen, regulatorischen, institutionellen und sonstigen vertraglichen und gesetzlichen Regelungen.

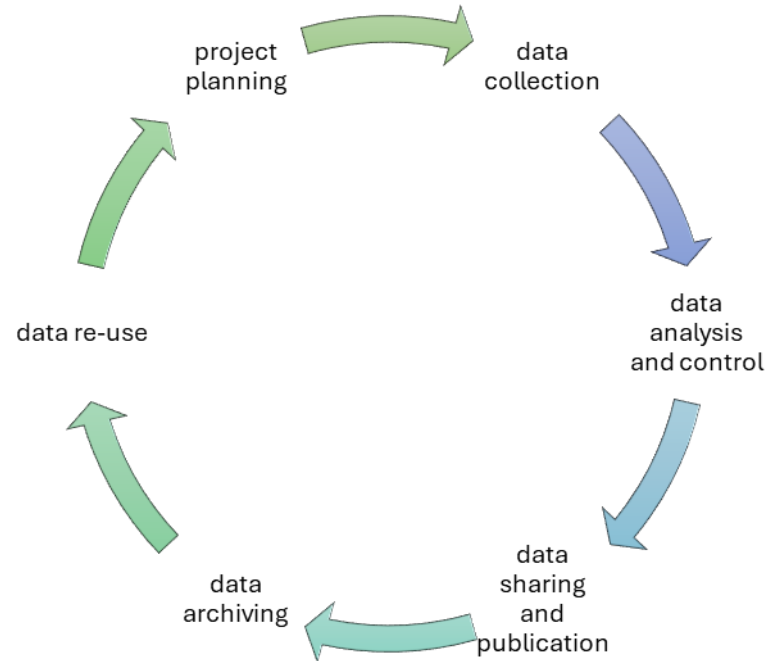
The Data Clearing Office is a service offered by MUI that assists researchers in determining, prior to the disclosure of personal data to external parties, whether and in what form such disclosure is permissible under data protection laws.

Mitteilungsblatt vom 14. Dezember  
2021 11. Stück, Nr. 46

# Research Data Lifecycle



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# What is a Data Management Plan?



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FWF Öste  
Wiss

A Data Management Plan (DMP) is a document that outlines the management of research data for a scientific project. This includes activities both during the research process and after the project is completed. The plan contains all the information necessary to describe and document the collection, processing, storage, archiving, and publication of research data.

## -Datenmanagementplan (DMP) Leitfaden und Vorlage

it-Plans für ein bewilligtes FWF Projekt. Das Dokument basiert mit geringfügig

ehen Sie dabei auf die Punkte der dritten Spalte ein. Die DMP-Vorlage finden  
sichen Sprache, wie der Förderantrag verfasst werden muss. Zusätzliche Infor

- |            |  |
|------------|--|
| [Redacted] |  |
| Id         | - Geben Sie die relevanten Projektinformationen an.            |
| vF-        | - Denken Sie daran, regelmäßige Updates des DMP durchzuführen. |
| 1.         |  |

# Funding organizations and their DMPs



Förderorganisation	DMP notwendig?	Einreichung	DMP-Muster
FWF	Yes	DMP along with the FWF grant agreement; the DMP is a prerequisite for the project to begin.	<a href="#"><u>Muster und Hinweise</u></a>
EU Horizon	Yes	The DMP must generally be submitted within the first six months of the project.	<a href="#"><u>Horizon Europe (TU Wien)</u></a>
FFG	For certain programs	After receiving funding approval	<a href="#"><u>DMP</u></a>
LBG	Clinical Research Groups	No later than the end of the fourth month after the project begins	Upon request, FWF rules apply

# General Information



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To be written in the language of the application

- Max. 10,000 characters (including spaces); keywords are sufficient
- Checklist: [FWF evaluation matrix](#)
- Project number
- Version/Date of DMP
- Name und E-Mail address of PI

Second version with end report (differences highlighted)

„Research data on which the project's publications are based “ (not: supplemental data)

Upload data to the repository/ZENODO

Example: Principal Investigator Dr.: in XYZ, email: ...@i-med.ac.at; FWF project number: 1234783z8538; DMP version: 1.0; License for this document: CC-BY- 4.0

# General Information



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Responsibilities and Duties: Implementation, Review, and Revision



Ex.: Name/position is responsible for data management and the creation and updating of the data management plan. Name/position as coordinator also coordinates the data exchange between the project partners.



Resources and costs associated with data management and FAIR (storage space, hardware, time, or repository fees)



Ex.: In order to prepare and document the data according to the FAIR criteria, X staff hours are estimated for 1 Ph.D. student and Y € for the provision in a repository OR no additional resources are required.

# Data Characteristics



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ID	Name	Type	Format	Volume	Re-used/Produced	Comment
1	Alcohol Consumption	Spreadsheet	CSV	~ 100 GB	New data will be produced	Observation
2						
3						

Ex.: The project uses existing data that has been published in specialist journals and is available in the XXX database. If necessary, other data from literature research and online repositories XXX will be used. The project will also use new experimental data generated by the collaborating partners. Restrictions may apply to the reuse of data from project partners. All published results will be freely available without access restrictions. A log will be created and maintained of the origin of the data.

- ID
- Name
- Data type (Text, Graph, Table etc.)
- Data format (doc, pdf, jpeg, csv, mp3, etc.), If necessary, explain the proprietary format
- Volume (GB/TB estimation)
- Description of reusable/generative data
- Source of the data (e.g., experiment, lab, data center, etc.)

# Documentation and Data Quality



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## Data organization

Naming convention  
clear structure of files

Version control

Ex.: The file names  
correspond to the  
conventions defined in  
document ABC.

## Metadata

Bibliographic metadata (e.g.  
title, author)

administrative metadata  
(e.g. file type, access rights,  
licenses)

Process metadata (e.g.  
methods)

descriptive metadata (e.g.  
on origin of data)

## Dokumentation

README-files

Lab book, context of data  
collection, methods reports,  
instruments

codebook, program for data  
processing, theoretical  
description of data

consent

# Documentation and Data Quality



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## Metadata

- [FAIRsharing.org](https://www.fairsharing.org/): MIQE; Minimum Information for Publication of Quantitative Real-Time PCR Experiments, DOI: 10.25504/FAIRsharing.mxz4jy, Last Edited: Monday, January 31st 2022, 9:18, Last Editor: delphinedauga, Last Accessed: Tuesday, May 16th 2023, 14:00

## Documentation

- Ex.: We will include README files. The files contain data directories and essential contextual information, e.g. about the software used to collect/process the data and the assumptions made in the analysis.

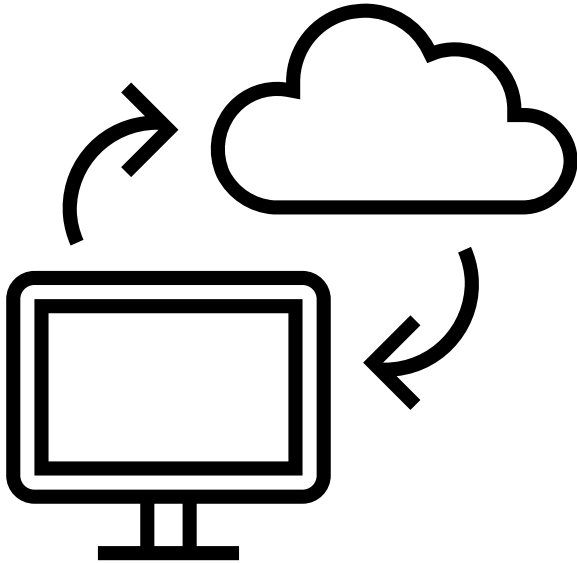
## Quality control

- repetition of sampling or measurements
- calibration
- standardised data collection
- validation of data entry
- peer review
- controlled vocabularies

# Storage, sharing, and long-term archiving



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## Data storage and Backup

- Network drives (personal, organizational unit/department, university)
- OX-drives
- Nextcloud
- GitLab
- Backup-Systems (Veeam)
- Repositories
- CEPH

Ex.: During the project, the data will be stored on institute drives, a central and redundant network drive with daily backups and regular snapshots provided by ICT (Department of Information and Communication Technology of MUI).

! Saving data on personal laptops, external hard drives, USB flash drives, etc., should not be an option!

# Storage, sharing, and long-term archiving



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## Repository

- Immediate access to data underlying research: “comply or explain”

- Persistent Identifier and License

- Specific Tools or DTA

- Restrictions for re-use of data

- Ex: Data underpinning research papers will be

made available for reuse in repository XX at the time of the publication of the article.

- [FWF OPEN AI](#)

- [Austrian Data Protection Authority](#)

- [Zenodo](#)

- [Re3data](#)





# Legal and Ethical Aspects

## Protection of personal data

Ex.: Personal data is collected for this project. Before the data is collected, the patients are informed in accordance with the data protection regulations and, in particular, of their rights under Art. 13 and 14 GDPR. The data collected is stored in an encrypted system to which only designated individuals who have signed a non-disclosure agreement have access. For evaluation, the data is pseudonymized by the collecting body and only passed on to the consortium partners in pseudonymized form. The data used for publication purposes will be anonymized.

# Legal and Ethical Aspects



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- Use within the project (esp. access policies, consortium agreement)
- IPR: e.g., databases, software
- Restrictions on the reuse of third-party data
- Use by third parties after the project ends (“Standard license: as open as possible, as closed as necessary”)
- Creative Commons Attribution; Special cases: CC-0, CC-ND-SA; MIT/BSD license
- [Choose a license](#)

Ex.: The rights to the data collected remain with the respective partners who created the data. Access to the data is regulated by the access committee. Through the consortium agreement, the project partners grant each other free access and usage rights to the data for duration of the project (possibly Information on data transfer). Possible industrial property rights (e.g. patents) are secured before the publication of the data. Further use of the data on which the scientific publications of the project are based is permitted under the following license: CC-BY-4.0 International or the XYZ license (pre-existing usage restriction).

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Databases



Software & Licenses



Data Use Agreement



Legal & Ethical Questions

# Legal and Ethical Aspects



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- Ethical Aspects of Data storage
- Code of Conduct (z.B. good scientific practise, origin of materials)

Ex.: An ethics vote by the MUI ethics committee is available. The part of the statute for ensuring good scientific practice at the Medical University of Innsbruck on January 19, 2016, the academic year 2015/2016, 12th item, no. 49, last amended in the bulletin of the Medical University of Innsbruck from 08/26/2020, the academic year 2019/2020, 58 pieces, no. 201 is observed. The consent of the patients was obtained by means of a declaration of consent; the data is only stored in pseudonymized form.

There are no ethical issues to consider because...

# Electronic LabBook



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*This open-source tool provides a modern, secure, and flexible platform for documenting experimental work, protocols, materials, and equipment, as well as for cross-team collaboration in day-to-day laboratory work. Interested users are welcome to contact the following email address with any questions or for further information*

***[elabftw@i-med.ac.at](mailto:elabftw@i-med.ac.at)***



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**elabFTW USER Guide  
Version 5.1.7**

**RDM Team**

Maria Kirchner

02.12.2024

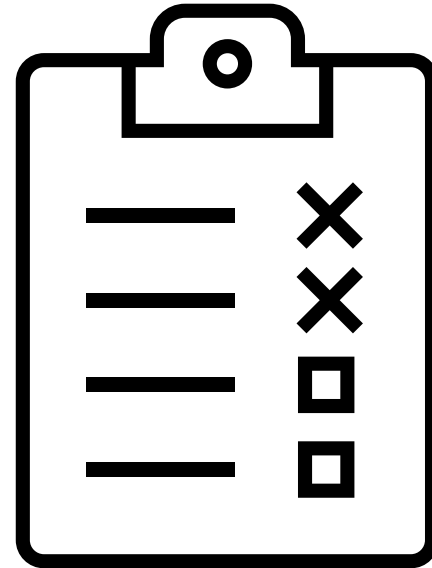
# AMDC – Access Point



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Setting up remote access to Austrian Micro Data Center (AMDC)

- MUI is accredited research institution at the Austrian Micro Data Center (AMDC); since 27.02.2024 up to 01.03.2029
- Letter of Commitment and Contract with Statistik Austria
- Information Sheet for Researchers on the Access Process (currently not available)



# Information on Research Data Management



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## Forschungsdatenmanagement - Abteilungen & Formulare - i-med wiki

Licenses

FAIR Principles

DMP Templates



Persistent Identifiers

Research Data Policy

Storage and Publishing

FAQs

CONTACT: [research-data@i-med.ac.at](mailto:research-data@i-med.ac.at)



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Thank you for your attention!