

Research Data Management

Dr. Juliane Jacob

24.09.2024



Data Sharing and Management Video

CENTER
FOR SUSTAINABLE
RESEARCH DATA MANAGEMENT



https://www.youtube.com/watch?v=66oNv_DJuPc

Center for Sustainable Research Data Management

CENTER
FOR SUSTAINABLE
RESEARCH DATA MANAGEMENT

- Central „operational unit“ according to §93 HmbHG, assignment to VP 3
- Cooperation with RRZ and other data centers

■ Our services

- Consulting, training and information
- Research Data Repository (UHH-RDR)
- Research Information System (RIS)
- Providing of Digital Object Identifier (DOI)
- Tool and consulting for Data Management Plans (DMP)
- Curation of (web-) applications / Heurist database toolbox

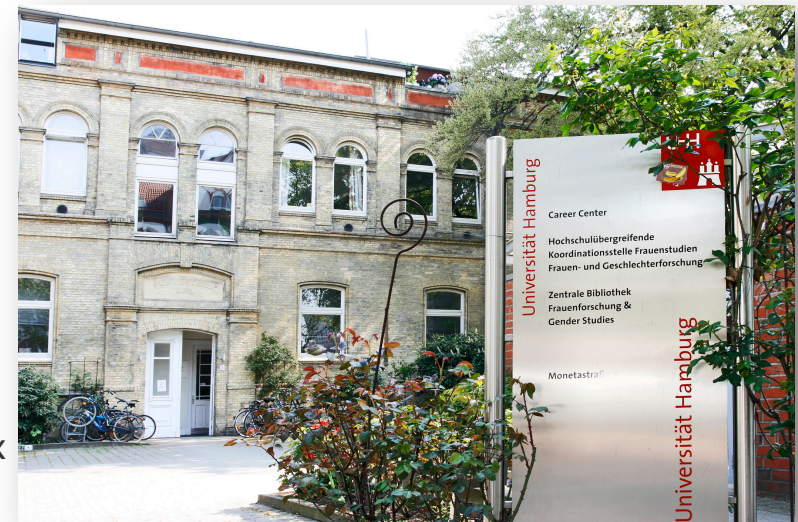


Photo: Pauli-Pirat

Motivation

CENTER
FOR SUSTAINABLE
RESEARCH DATA MANAGEMENT

Good Scientific Practice and Research Data Management

- Quality assurance of scientific work
- Guidelines for ensuring good scientific practice and behavior in case of scientific misconduct
- What are my tasks?
- What do I have to do personally?
- What am I responsible for?
- How do I do it?

What do we mean by research data?

CENTER
FOR SUSTAINABLE
RESEARCH DATA MANAGEMENT

All data and materials used in research:

Measurement data, laboratory values, audio, video, texts, surveys, images, objects from collections, samples, algorithms, software, 3D data, scans, simulation data...

All data types, file formats, kilobyte to exabyte...



$$f(x)$$



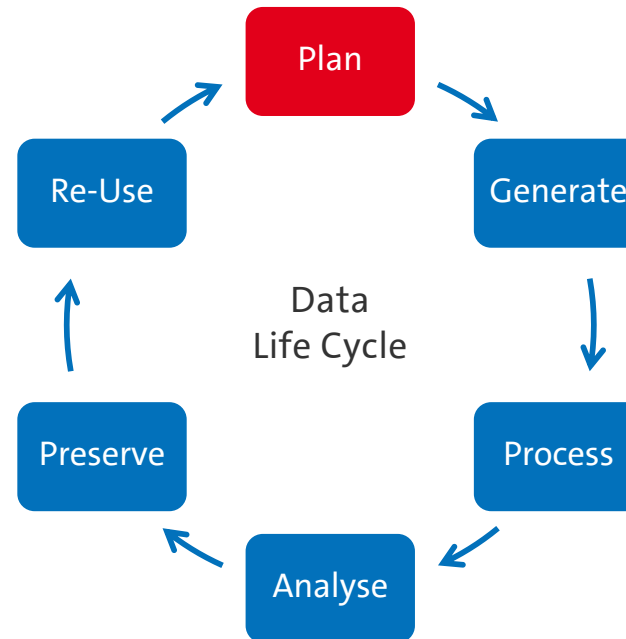
What is Research Data Management?

CENTER
FOR SUSTAINABLE
RESEARCH DATA MANAGEMENT

„Process to ensure long-term usability of research data.“

Longterm aspects

- Archive data, keep ready for at least 10 years
- Ensure data access in the case of closed access (data trustee, Treuhänder)
- Keep keys for encrypted data
- Keep software
- Maintenance of web applications



Daily Work

- Save work data
- Describe data
- Data exchange

Daily Work

CENTER
FOR SUSTAINABLE
RESEARCH DATA MANAGEMENT

- Save data
 - Naming Convention → Versioning:
20240924_GWP_Gasser_v1.ppt
 - File formats, software
 - 3-2-1-Backup Rule
- Describe data
 - Metadata (Schema)
 - Documentation, README file
- Exchange data (B-identifier)
 - UHH Cloud
 - (UHH Share)



README



UHHCloud

Archiving, publishing Data

CENTER
FOR SUSTAINABLE
RESEARCH DATA MANAGEMENT

- Finishing thesis or leaving UHH: Handing over data properly, network drives, local data storage, etc. will be deleted!
- Legal aspects: Copyright, usage rights, sensitive data...
- Publish data, posters... in UHH research data repository - www.fdr.uni-hamburg.de/ for testing <https://staging.fdr.uni-hamburg.de/>
- Publish articles open access <https://www.oa.uni-hamburg.de/oaf>



Repo



Test-Repo



OA-Fonds

Why is RDM important?

CENTER
FOR SUSTAINABLE
RESEARCH DATA MANAGEMENT

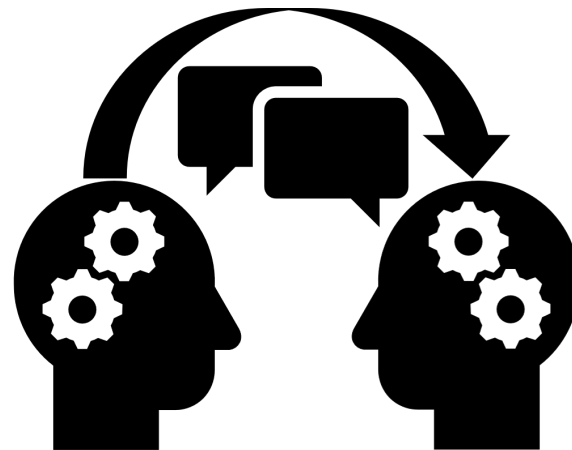
- „Good Scientific Practice“ – reproducible results
- Research data is expensive
- Data publication - data as a resource for new research
- RDM is very important for funders and applications
- DFG (checklist), EU, BMBF applications require Data Management Plans
- <https://www.fdm.uni-hamburg.de/ueber-uns/a-nachrichten/fdm-dfg-checklist.html>



What are best practices in RDM?

- Do it at all!!!
- Use established data formats and repositories, if available from your scientific community
- FAIR - Findable, Accessible, Interoperable, Re-usable
- Use persistent identifiers (DOI)
- Use open licenses if possible (Creative Commons licenses)
- Observe data protection, legal situation, ethics
- Always make descriptive metadata freely available
- "As open as possible, as closed as necessary"

Questions?



©Knowledge&Mind

Kontakt



Dr. Juliane Jacob

Wissenschaftliche Mitarbeiterin

Universität Hamburg

Zentrum für nachhaltiges Forschungsdatenmanagement

Monetastraße 4

20146 Hamburg

+49 40 42838-4709

juliane.jacob@uni-hamburg.de

forschungsdaten@uni-hamburg.de



Universität Hamburg

DER FORSCHUNG | DER LEHRE | DER BILDUNG