

eResearch Lab: GRO.plan

Introduction to Data Management Planning at the Göttingen Campus

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eResearch / Alliance



Survey: Who are you? (1)

A: I am a bachelor student

B: I am a master student

C: I am a doctoral/PhD student or scientific assistant

D: I am a PostDoc

E: None of the above



Survey: Who are you? (2)

I am from the ...

A: natural/structural sciences

B: arts and humanities

C: social sciences

D: Jurisprudence

E: None of the above



Survey: Who are you? (3)

I am studying / doing a PhD / working

A: in Göttingen

B: not in Göttingen



Survey: What do you know?

My experience with Data Management Plans (DMPs) is best described as...

A: I have already worked on several DMPs for various projects.

B: I was involved in writing DMPs occasionally.

C: I have never worked on a DMP, but I have to provide one soon.

D: I have no experience with DMPs, but am interested in the topic.

E: None of the above



Structure

- Introduction to Data Management Planning
- RDMO
- Introduction to GRO.plan
- Discussion

Comments, questions and suggestions for using GRO.plan can be entered here:

https://pad.gwdg.de/eResearchLab 20201202 GROplan#

Introduction to Data Management Planning



Types of research data

Туре	Characteristics	Example
Observations	Data is collected in real time Mostly irreplaceable	Sensor data Survey data
Experiments	Mostly created in the laboratory Reproducible but expensive	Gene sequences Chromatogram
Simulations	Generated from test models Model and metadata more important than output	Climate models Economic models
Derived data	Derived or compiled from other data, reproducible	Text Mining 3D models
References	Collection of smaller data sets Mostly published	Gene sequence database Primary text sources
Digital copies	Digital version of an analog object, reproducible as long as the original exists	Manuscripts



Research cycle

Develop research question

Publish results

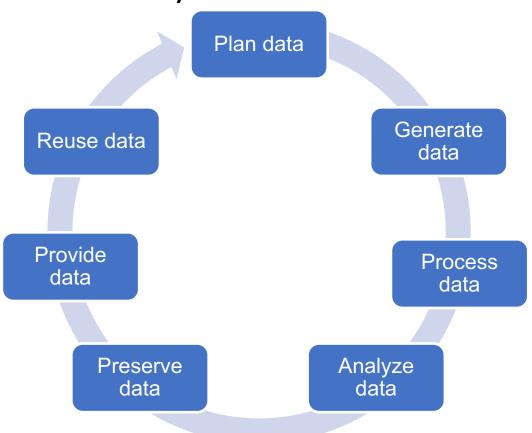
Plan research project

Analyze data/results

Conduct research



Research data cycle





Research data guideline of the Georg-August-University of Göttingen

- Officially published on August 28, 2014
- One of the first German universities with such a guideline



Source: http://www.uni-goettingen.de/en/488918.html



Research data policy of the Georg-August-University of Göttingen

- Officially published on August 28, 2014
- One of the first German universities with such a guideline
- Topics covered:
 - Research data, research data management and its purposes
 - Data management plans
 - Support, training and service delivery
 - Storage solutions
 - Ethical and legal standards
 - Open Access
- eResearch Alliance: Support and consultation for the implementation of the policy for the Göttingen Campus

interior or exaces our publisher will depend on the settings and requirements of each subject area.

In implementation of this guideline will depend on the settings and requirements of each subject area.

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In a second data are those data collected observed, simulated, derived, or generated during the course of research.

A imagement of research data includes their planning, collection, processing, and presention. It ensures the access to, and the reuse, reproducibility, and quality assurance of all research data includes their planning, collection, processing, and presentials.

It is a sufference to good practices of research results.

It is a sufference to good practices of research sets as standards in their subject area.

It is a sufference to good practices of research data require a data management plan that includes but is not restricted to the topics of access rights to research data and necessary processions for handling them.

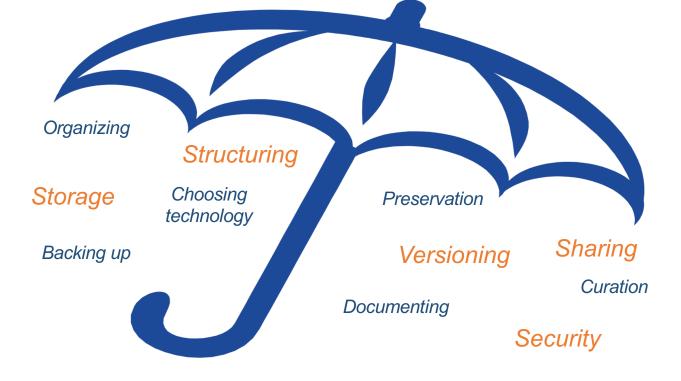
The University provides support and advice for research data management in the preparatory stages of research projects, during their conduct and after their completion, and provides appropriate training.

The University provides and maintains essential sentence for research data indicativative that ensures adequate storage and technical availability of digital research data is carried out within the technological and informational infrastructure of the University or in acknowledged esternal or internal subject proportions.

The University and its researchers others in their research data management to gluen conditions of efficie. data renderion infalativat property reliance and recommend to gluent research data in carried out within the technological and information in infrastructure of the University or in acknowledged esternal or internal subject greaters.



What is Research Data Management?



Why research data management?

- Improve your research
- Adhere to Good Scientific Practice
- Improve collaboration with colleagues
- Get credit through Data Publication
- Enable new research questions

eResearch Alliance

Why plan your Research Data Management?

1. Become aware of problems before they arise

- · Like you plan your thesis or research project, you should plan your data management
- Identify roles, responsibilities, resources and solutions before data are generated

2. Prevent double work and time pressure

- Keep data management problems to a minimum during hot research phases
- Rest assured knowing that your (intermediate) research results are well-managed

3. Requirement by funders

- EU: participation in Horizon 2020 Open Research Data Pilot, guidelines
- DFG: Guidelines on handling of research data
- BMBF: varying requirements depending on discipline, e.g.: https://www.bmbf.de/foerderungen/bekanntmachung.php?B=774
- In US and UK DMPs are mandatory for quite some time already



Data Management Planning: Further infos

Göttingen eResearch Alliance:

 https://www.eresearch.uni-goettingen.de/knowledge-base/howto/how-to-datamanagement-planning/

Forschungsdaten.org (German):

• https://www.forschungsdaten.org/index.php/FAQs#Was_ist_ein_.28Forschungs-.29Datenmanagementplan.3F

Forschungsdaten.info (German):

 https://www.forschungsdaten.info/themen/informieren-undplanen/datenmanagementplan/



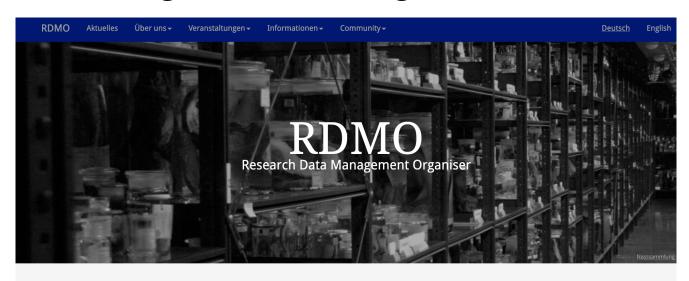
Data Management Planning: Tools





RDMO: Research Data Management Organizer





Project: https://rdmorganiser.github.io/
Demo instance: https://rdmo.aip.de/



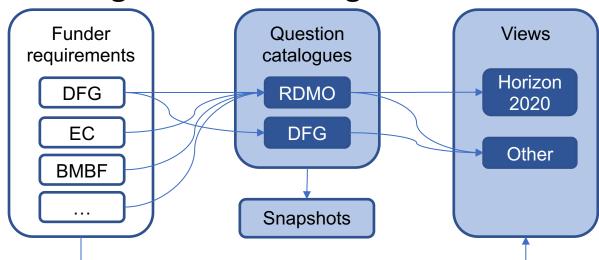
 Research Data Management Organiser (RDMO) supports the systematic planning, organisation and implementation of research data management throughout the course of a project.

- DFG-funded project 2015-2020
- Ongoing transformation to community-based consortium
- RDMO is being used productively at 17 research institutions in Germany, and being tested for productive use at over 20 more institutions.

Features:

- versioning of DMPs to allow evolving DMPs over project lifecycle and beyond
- output of DMPs as text documents according to funder requirements
- built-in multilingual support
- adaptable templates for various purposes, e.g. funder-required DMPs





- Question catalogues
 - Used for defining the questions to be answered
 - Can span requirements from multiple funders or be funder- or discipline specific
- Views
 - Used for defining the selection and display of given answers
 - Selection of answers according to one funder, discipline or call

Introduction to GRO.plan



GÖTTINGENRESEARCHONLINE

Publications

Publication data management

Dspace-CRIS

Data

Research data repository

Dataverse

Instruments

Large equipment portal

openIRIS

Plan

Data management planning

RDMO

...

further services

www.goettingen-research-online.de



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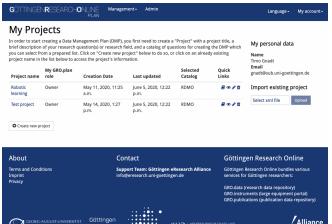
plan.goettingen-research-online.de



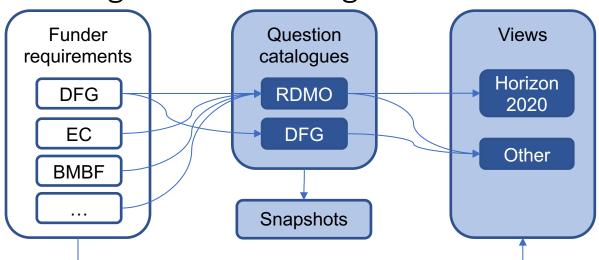
GRO.plan - Data management planning tool

- based on RDMO software
- customizations according to Campus requirements
- integration into Portal Göttingen Research Online (GRO)
 - allow connection with other GRO services
- changes in code and content are discussed with and fed back to RDMO community









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Thank you for your participation!

The comments, questions and suggestions of the participants for this eResearch Lab can be found here:

https://pad.gwdg.de/eResearchLab_20201202_GROplan#

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