„Introduction into JGU´s research data management services, the FAIR data principles and the new rules for good research practice with regard to research data.“

November 29th 2023

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JOHANNES GUTENBERG UNIVERSITÄT MAINZ

JG|U

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TODAY´S PROGRAM

09:40 - 10:00 am:	**„Introduction into JGU´s research data management services, the FAIR data principles and the new rules for good research practice with regard to research data.“** Dr. Anne Vieten, Esther Reineke, Tina Rotzal
10:00 - 10:30 am:	**„The iRODS Research Data Archive of the JGU: Introduction to its usage“** Dr. Jörg Steinkamp
10:30 - 11:00 am	**„Gutenberg Open Science: Mainz University Library's repository for open access publications and open data“** Karin Eckert
11:00 - 11:15 am:	- Break -
11:15 - 12:00 am:	**„Research Data Management Organiser (RDMO): A tool to create data management plans“** Dr. Anne Vieten
	- Lunchbreak -
01:00 - 01:30 pm:	**„Digitalisierung von Forschungsmaterialien am Servicezentrum Digitalisierung und Foto-dokumentation“** Dr. Klaus T. Weber
01:30 - 02:00 pm:	**„Gutenberg Capture - Repositorium für digitale historische Quellen**“ Silke Baumann, Karin Eckert
02:00 - 02:30 pm:	**„Gutenberg Images - die komfortable, flexible Bilddatenbank der Universitätsbibliothek Mainz“** Maximilian Herms

THE TEAM OF RESEARCH DATA EXPERTS

- **Dr. Anne Vieten** (Department for Research and Technology Transfer): general RDM aspects, RDM-requirements of funders, DMPs, data publication …
- **Dr. Jörg Steinkamp** (Data Center): technical RDM aspects, GitLab, data archiving, …
- **Karin Eckert** (University library): Metadata, Gutenberg Open Science, data publication, …
- **Esther Reinecke and Tina Rotzal** (University library): good scientific practice, academic integrity

Contact: forschungsdaten@uni-mainz.de

https://www.forschungsdaten.uni-mainz.de/

RDM-SERVICES AT JGU

1. **Consultation:**

- General RDM questions and basics
- Requirements of third-party funders on RDM and Open Data
- Data management plans (DMP)
- Creation of project-specific RDM policies
- Data publication and archiving
- JGU repositories and subject specific repositories (Open Data)
- Technical RDM
- Good scientific practice with respect to RDM

RDM-SERVICES AT JGU

2. Training courses:

- Requirements of third-party funders for RDM and Open Data
- GitLab
- Courses on demand: e.g. data management plans, general RDM introductions

3. Informational events:

- RDM days at JGU
- FORSCHUNGSDATEN@RMU

RDM-INFRASTRUCTURES AT JGU

Research Data Management Organiser (RDMO) : DMP-Tool

iRODS-Archive: Research Data Archive

Gutenberg Open Science: Repository for open access publications and research data

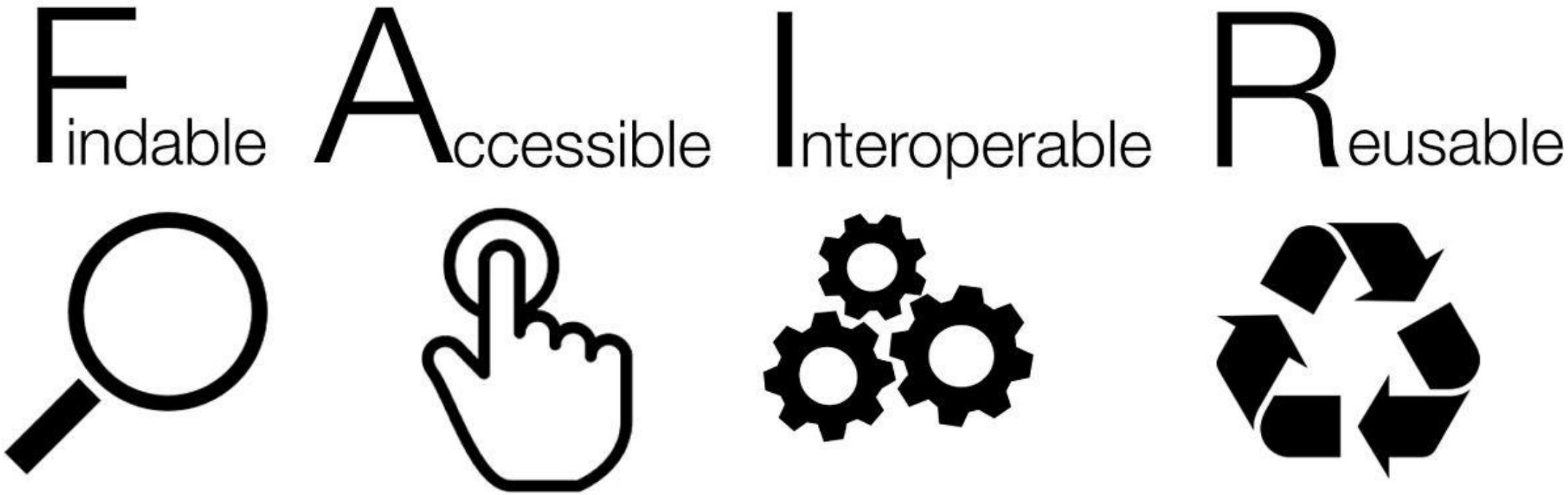
Gutenberg Capture: Repository for Historical Sources

Gutenberg Images: Image Database

REPOSITORY, ARCHIVE, DATABASE …

What is the difference?

THE FAIR DATA PRINCIPLES



Quelle: https://commons.wikimedia.org/wiki/File:FAIR_data_principles.jpg
Autor: SangyaPundir Titel: "FAIR Guiding principles for data resources" (17.11.2016)

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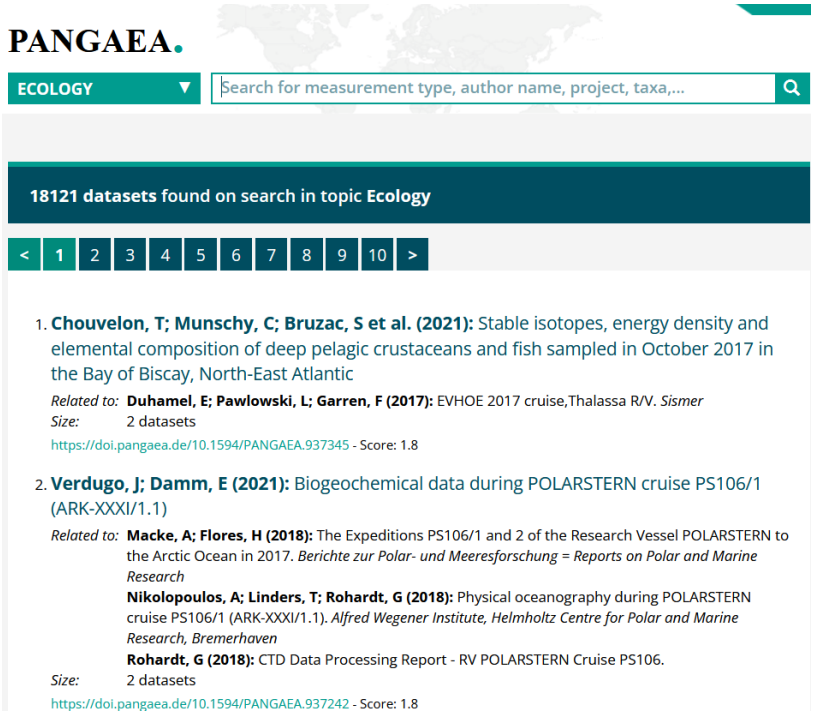
FAIR DATA

Short Keyword – High Impact!

HOW TO MAKE DATA FINDABLE?

- Describe research datasets with **metadata**
- Metadata is indexed in a searchable directory or repository
- Publication of research data, if applicable
- Provide research data (metadata) with persistent identifiers (DOI, URN etc.)



HOW TO MAKE DATA ACCESSIBLE?

- Metadata and/or actual data are easily accessible
- Metadata available even if actual data is not accessible
- Defined licensing and access conditions

Coverage:	*Median Latitude:* 47.196250 * *Median Longitude:* 8.468551 * *South-bound Latit*
License:	Creative Commons Attribution 4.0 International (CC-BY-4.0)
Size:	73 datasets

HOW TO MAKE DATA INTEROPERABLE?

- Data are combinable with other data sets by humans or computers.
- Use of non-proprietary, open and described or commonly used formats

Recommended formats
Tables: CSV, TSV, SPSS portable Text: TXT, HTML, RDF, PDF/A Image: TIFF, JPEG2000, PNG Multimedia: AVI, WAV, MP4

HOW TO MAKE DATA REUSEABLE?

- Data are in a form in which they can be used for further research and processing with computer-aided methods

Recommended formats

Tables: CSV, TSV, SPSS portable
Text: TXT, HTML, RDF, PDF/A
Image: TIFF, JPEG2000, PNG
Multimedia: AVI, WAV, MP4

Coverage:	*Median Latitude:* 47.196250 * *Median Longitude:* 8.468551 * *South-bound Latit*
License:	Creative Commons Attribution 4.0 International (CC-BY-4.0)
Size:	73 datasets

Data Cite (Metadata) Basic Scheme

- Identifier
- Creators
- Title
- Publisher
- Publication year
- Subject
- Language
- Resource type
- Description

GOOD RESEARCH PRACTICE

REGULATIONS

for ensuring good research practice

and for dealing

with research misconduct

of Johannes Gutenberg University Mainz

dated February 13, 2023

gwp.uni-mainz.de (German)
grp.uni-mainz.de (English)

Persons involved in research at JGU are obliged

1. to work in accordance with the accepted rules of their scientific discipline (lege artis)
2. **to document and archive research findings in accordance with the rules of their discipline,**
3. **to be stringently honest when handling contributions from third parties,**
4. to assess the consequences resulting from their research and the ethical aspects thereof,
5. to consistently question their own research findings and those of others,
6. to allow and encourage critical discourse in the scientific community, and
7. to conduct themselves in an academically fair and collegial manner.

Section 5 Documentation (summarized)

Traceability of: research data and findings collected, methods, evaluations, analyses, interpretations, intellectual property of others, source codes

Documentation of individual results that do not corroborate the research hypothesis

Traceability also if documentation cannot be made (e.g. for technical reasons)

No manipulation of documentation and research results

Quelle: Adobe Stock, author dbunn

RDM IN THE REGULATION FOR GOOD RESEARCH PRACTICE

Section 5 Documentation

"1. All information and steps in the research process relevant to the production of research findings must be documented in such a comprehensible manner as is necessary and appropriate in the concerned field to enable the verification and evaluation of these findings.

2. Documentation includes all relevant sub-steps of the research process. In particular, the following is considered required:

1. the research data and findings collected, how they were generated, and how they have been used,
2. the applied methods, evaluations, analyses, and interpretations,
3. the intellectual property of others that has been used, and
4. source codes (in the development of research software).

3. Individual results that do not corroborate the research hypothesis or interpretation must also be documented in order to be able to properly verify and evaluate overall findings. Ignoring such individual results opposes the goal of verification and evaluation and is therefore unacceptable.

4. If, in individual cases, documentation or parts thereof cannot be made or can only be made to a limited extent for technical, comprehensible reasons, this must be explained transparently and comprehensibly and be documented.

5. Documentation and research findings may not be manipulated and must therefore be protected against unauthorized access and manipulation to the greatest extent possible."

Section 6 Handling Research Data (summarized)

Data collection and software development in accordance with subject-specific standards

Respect copyright and data protection

Note the rights of use of research data

Publication of research data is based on the FAIR Guiding Principles

Archiving for at least 10 years (e.g. JGU Data Center's research data archive)

No handpicking data, archive also the data that does not support the original research hypothesis

Quelle: Adobe Stock, author dbunn

RDM IN THE REGULATION FOR GOOD RESEARCH PRACTICE

Section 6 Handling Research Data (abridged)

- „ (…) The type and scope of research data generated as well as the applied methods and evaluation and analysis steps must be described in an understandable and comprehensive manner (…) “ (Subsection 1)
- „The collection and use of research data must comply with legal requirements, in particular with regard to copyright and data protection.“ (Subsection 3)
- „ (…) The use of research data belongs primarily to the person who collects it, subject to copyright regulations. A transparent agreement on the right to use the research data and findings from a project must be concluded as part of research collaborations and within work groups. (…) ” (Subsection 4)
- “In keeping with the principles of scientific transparency and traceability, research data underlying a publication should be published if this is feasible and reasonable. The publication of research data is based on the FAIR Guiding Principles for scientific data management and stewardship (Findability, Accessibility, Interoperability, Reusability). Research data must be published in a form that enables others to replicate the findings. (…) ” (Subsection 5)

RDM IN THE REGULATION FOR GOOD RESEARCH PRACTICE

Section 6 Handling Research Data (abridged)

- „Research data underlying a publication are made accessible and stored in longterm readable formats for at least 10 years at the author's own institution or in repositories or archives for research data across different sites. Exceptions exist for data that must be destroyed for legal or other science-based reasons. The JGU Data Center's research data archive is recommended for archiving research data at the university. The storage period begins on the date that public access to the research findings is established. The project managers of a research project are primarily responsible for this." (subsection 6)

RDM IN THE REGULATION FOR GOOD RESEARCH PRACTICE

Section 6 Handling Research Data (abridged)

- „The storage requirements specified in Subsection 6 also apply to research data that does not support the original research hypothesis. Handpicking data that could distort the findings is unacceptable. In every instance where individual data points and results cannot be included for comprehensible reasons – in particular as part of a publication – this must be indicated in an appropriate form. Section 5 Subsection 4 applies accordingly.” (Subsection 7)

More information on our website grp.uni-mainz.de

JOHANNES GUTENBERG UNIVERSITÄT MAINZ

GOOD RESEARCH PRACTICE

HOME SEARCH INDEX SITEMAP DEUTSCH

HOME RULES AND REGULATIONS POINTS OF CONTACT INFORMATION

TOPLINKS

- THE NEW REGULATIONS FOR ENSURING GOOD RESEARCH PRACTICE OF JGU Download PDF file
- DFG CODE OF CONDUCT Guidelines for Safeguarding Good Research Practice
- STATEMENT BY THE EXECUTIVE COMMITTEE OF THE DEUTSCHE FORSCHUNGSGEMEINSCHAFT (DFG, GERMAN RESEARCH FOUNDATION) ON THE INFLUENCE OF GENERATIVE MODELS OF TEXT AND IMAGE CREATION ON SCIENCE AND THE HUMANITIES AND ON THE DFG'S FUNDING ACTIVITIES Download PDF file

Rules and regulations | **Points of contact** | **Information**

JGU Regulations for ensuring good research practice

You would like to know which regulations apply to you as a JGU member? Take a look at the reading version of the JGU regulations!

more »

JGU policies and national regulations

The regulations of the individual scientific institutions are mostly based on comprehensive recommendations such as the DFG Code of Conduct. The regulations of the individual scientific institutions are usually based on overarching recommendations, such as the DFG Code. This and an overview of other recommendations can be found here.

more »

International regulations

If you collaborate internationally with scientists from other institutions, you might also be interested in these international regulations on good research practice.

more »

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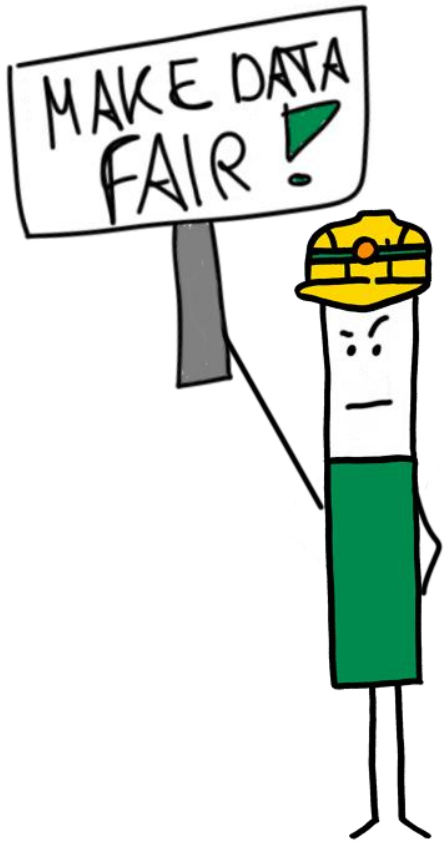
THANKS FOR YOUR ATTENTION

Questions?



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