

# Sharing Research Data

## where to deposit & publish Research Data

Pedro Principe, University of Minho

CONTEXT OF THE TRAINING IS ESSENTIAL – taking into account the context, the audience and the type of training (we all know is critical for the success)

**BUT**

training on RDM in Open Science setting...

is critical that we focus on **SHARING** research data;

clarifying the meaning and implications of openness;

identifying the **VENUES TO PUBLISH** and deposit research data;

trying to minimize the complexity of the topics...



## Why share data?

It's part of good data practice

"It was \*never\* acceptable to publish papers without making data available."

- Ewan Birney

#OpenData  
#OpenScience



Original image via doi:10.1038/461145a. "Research cannot flourish if data are not preserved and made accessible. Data management should be woven into every course in science." - Nature 461, 145

OPEN  
DATA

FAIR DATA

RESEARCH DATA  
MANAGEMENT

## Why manage data?



Make research easier



Get credit for it



Save data for later



Avoid accusations of  
fraud or bad science



Share data for re-use



Meet funder or institution  
requirements

EMPHASIZING THE FOCUS ON SHARING



# PUBLISH DATA



Universidade do Minho  
Serviço de Documentação e Bibliotecas

**OPEN RESEARCH DATA IN HORIZON 2020**

**CHALLENGE**  
Wider access to scientific facts and knowledge helps researchers, innovators and the public find and re-use data, and check research results:

- offers better value for EU research funds
- encourages research across scientific fields

**SOLUTION**  
Horizon 2020 already mandates open access to all scientific publications

UNião Europeia

## HORIZON EUROPE

#HorizonEU

Junho de 2021

«O programa Horizonte Europa irá definir um novo padrão na divulgação de conhecimentos e novas competências nas sociedades europeias. Com requisitos de acesso aberto claros e imediatos para os beneficiários, a plataforma de publicação Open Europe Research e uma Nuvem Europeia para a Ciência Aberta reforçada, estamos no bom caminho para fazer da ciência verdadeiramente aberta uma realidade.»

Mariya Gabriel, comissária de Inovação, Investigação, Cultura, Educação e Juventude

## ENSURE THAT DATA HAVE A MORE PROMINENT ROLE

- I ensure good data management practices (storage and documentation)
- I deposit data in trusted repositories with persistent identifiers.
- I associate data with publications.
- I publish the results of my projects in organized collections and for reuse.

## nature materials

Editorial | Published: 18 December 2019

### Data take centre stage

*Nature Materials* 19, 1(2020) | [Cite this article](#)

999 Accesses | 42 Altmetric | [Metrics](#)

We are updating our editorial policies to further encourage authors to make their data publicly accessible. Publishing Extended Data figures and source data online will also ensure that data are given a more prominent role.

A Data availability statement for accepted articles has been requested by the Nature Research journals for the past three years<sup>1</sup>. In this statement, our authors declare how the data behind their published research can be accessed by interested readers, and disclose any potential restriction limiting data sharing. This initiative, aiming at increasing the reproducibility of our papers, has been seamlessly accepted by researchers, who have promptly added this declaration to their manuscripts submitted to the Nature titles. However, in the vast Data take centre stage. *Nat. Mater.* 19, 1 (2020). <https://doi.org/10.1038/s41563-019-0574-2>

# PUBLISH DATA – Clarify concepts & differences

## AN IMPORTANT DIFFERENCE

- **Deposit:** upload a digital object (data, articles, ...) on a platform that allows to correctly describe the object through metadata and that implements long-term preservation.
- **Give access:** once the object has been deposited, the authors can choose the type of access that can be granted (open, restricted, closed, embargoed,...) and assigns a licence to reuse the contents (Creative Commons)



## WHAT IS THE DIFFERENCE BETWEEN SHARING, PUBLISHING & ARCHIVING?

*SHARED:* any way of sharing information, could mean I emailed it to you.

*PUBLISH:* citable artifact, discoverable.

*ARCHIVE:* long-term preservation.

Reference:

<https://datacarpentry.org/rr-publication/01-publication/>

# DEPOSIT DATA

- **What to deposit?**

→ everything needed to **find, assess, understand, & reuse** data



## DATA

- open/common file formats
- use relevant standards for interoperability



## METADATA ('data about data')

- highly structured, machine-readable
- fixed set of attributes (schema)
- use existing (domain-specific) standards



## ANY OTHER DOCUMENTATION

- codebooks explaining variables
- study context, protocol, methods
- dataset structure
- notes/annotations
- software code
- machine configurations
- consent information
- ...

# Open Research Data policy requirements

DATA, including metadata, needed to validate the results in scientific publications.



Other data, including metadata, as specified in the Data Management Plan.

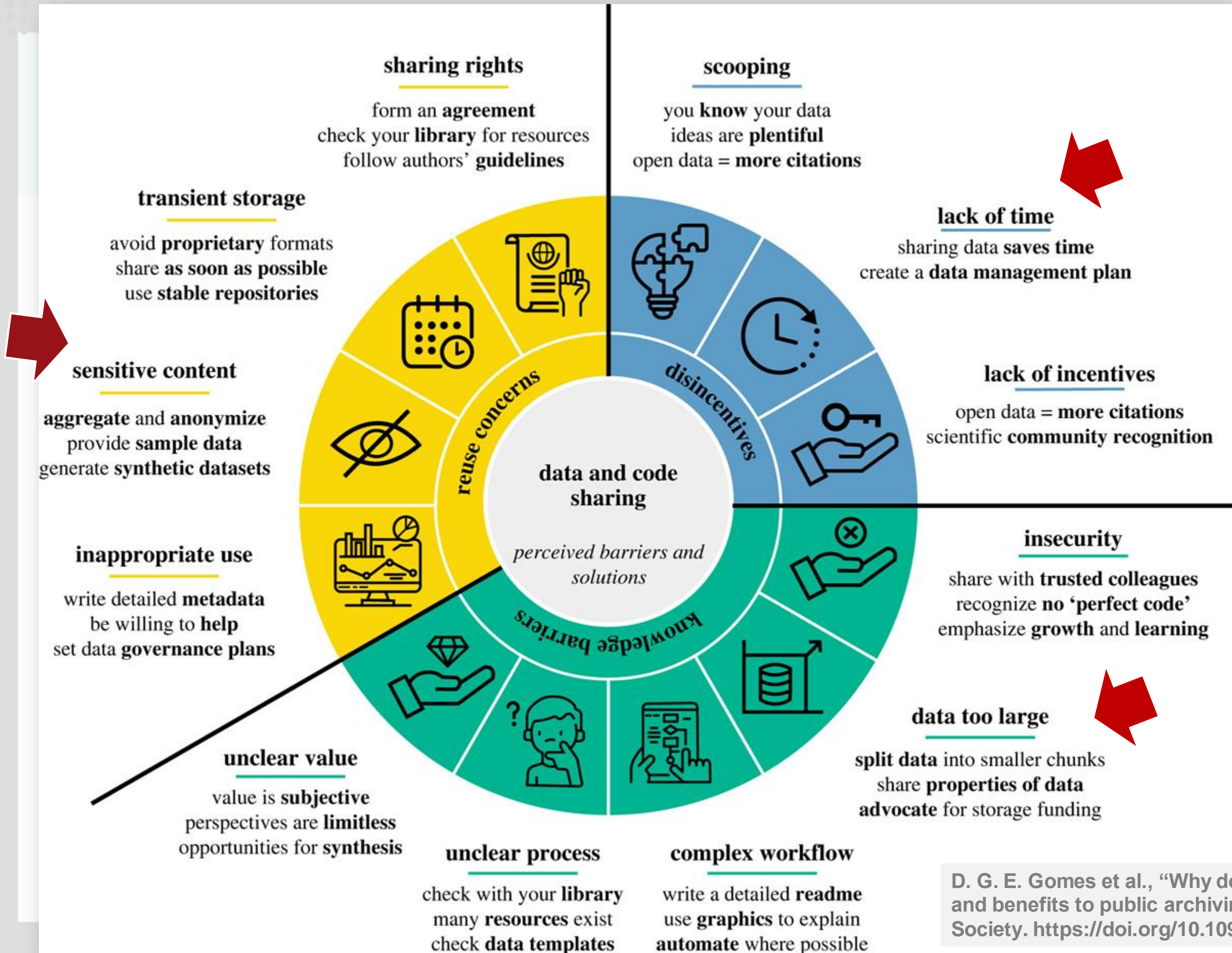


# Open Research Data policy requirements

Write, and keep up-to-date, a Data Management Plan.

Deposit the data in a research data repository.





**Lack of incentives**

**Concerns**

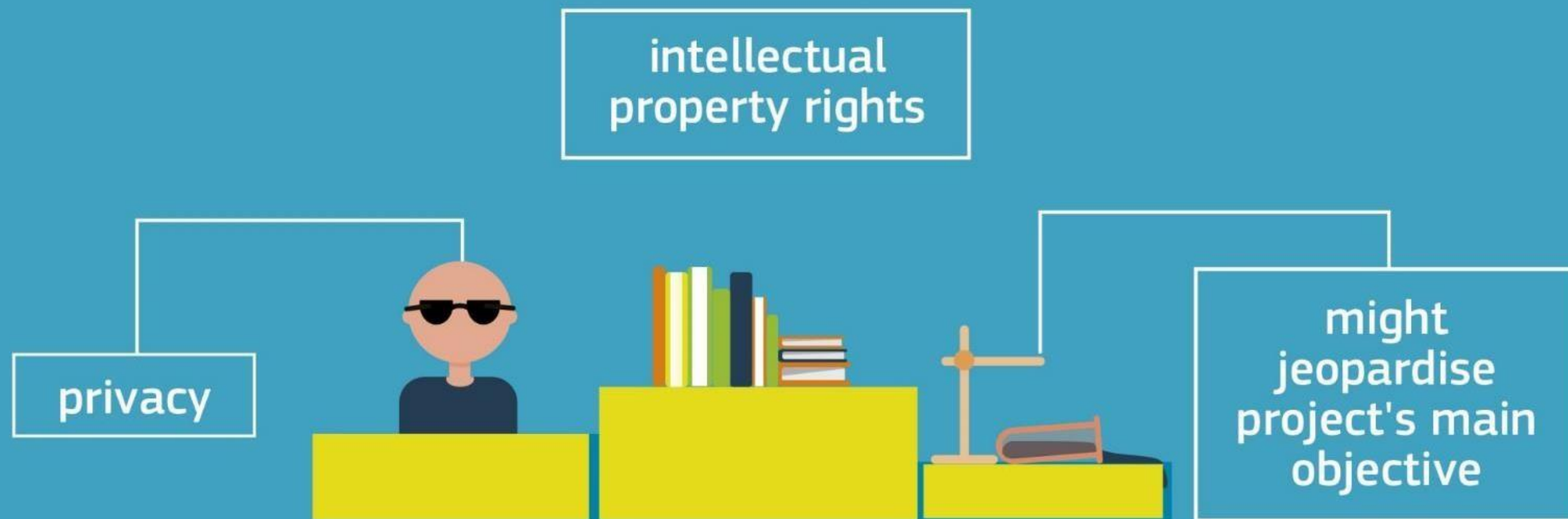
**Several Barriers**

D. G. E. Gomes et al., "Why don't we share data and code? Perceived barriers and benefits to public archiving practices," 2022, vol. 289, no. 1987. Royal Society. <https://doi.org/10.1098/rspb.2022.1113>

# AS OPEN AS POSSIBLE, AS CLOSED AS NECESSARY

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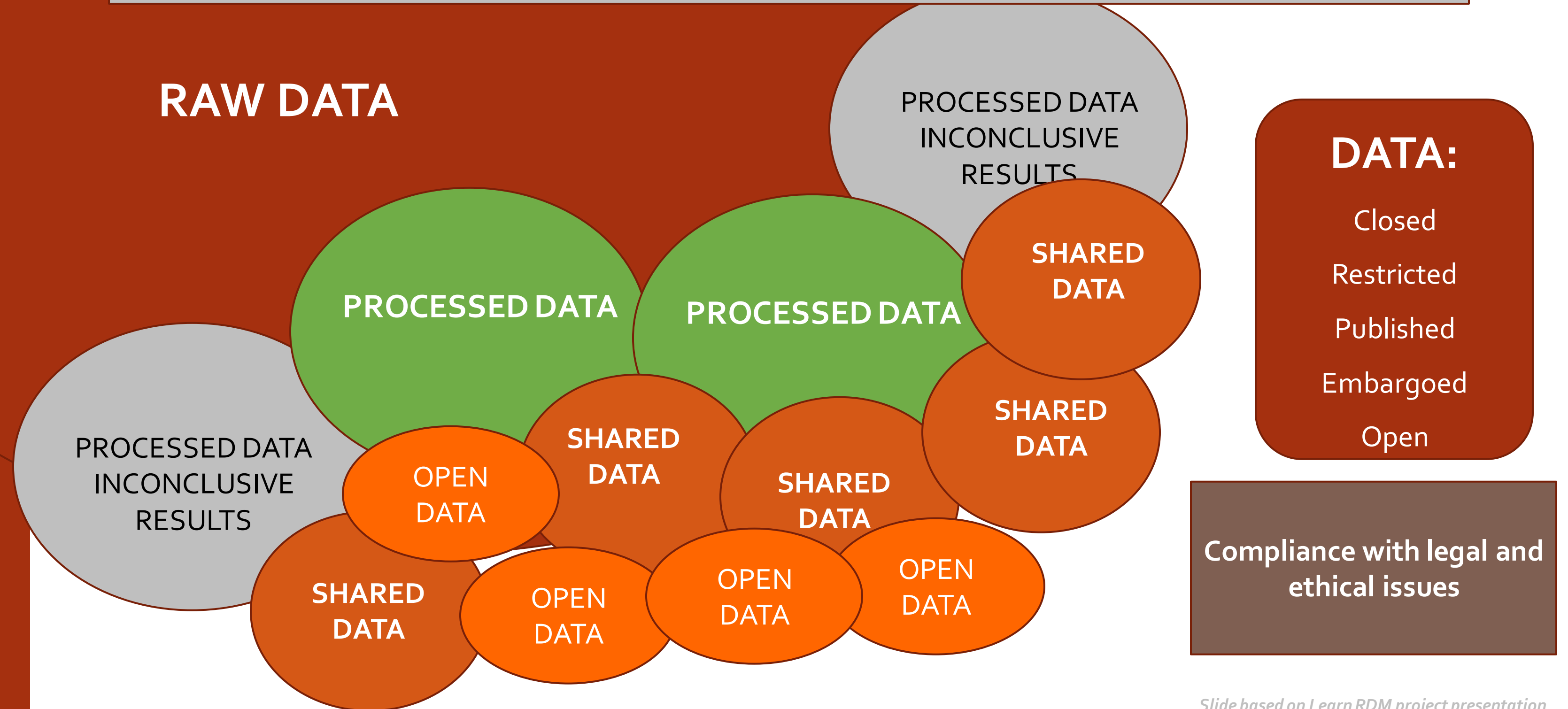
Grantees have the right to **opt-out**, but need to say **why**





# Different levels of processing and sharing data

## RAW DATA



# PUBLISH DATA – WHERE?

## Journal service for supplementary material

Meet publisher requirements

Data available from published results

It can be costly and risky with data rights

Closed and unlikely access to ensure preservation

## Institutional data repository

Accept various types of data, ensure long-term access

More reliable and there will be no costs

May not offer long-term sustainable access

May not have disciplinary metadata

## Generic repository

Reach a wider audience.

Accepts several types, suitable for interdisciplinary data

Usually only simple metadata is available

No editorial control over the quality of deposited materials

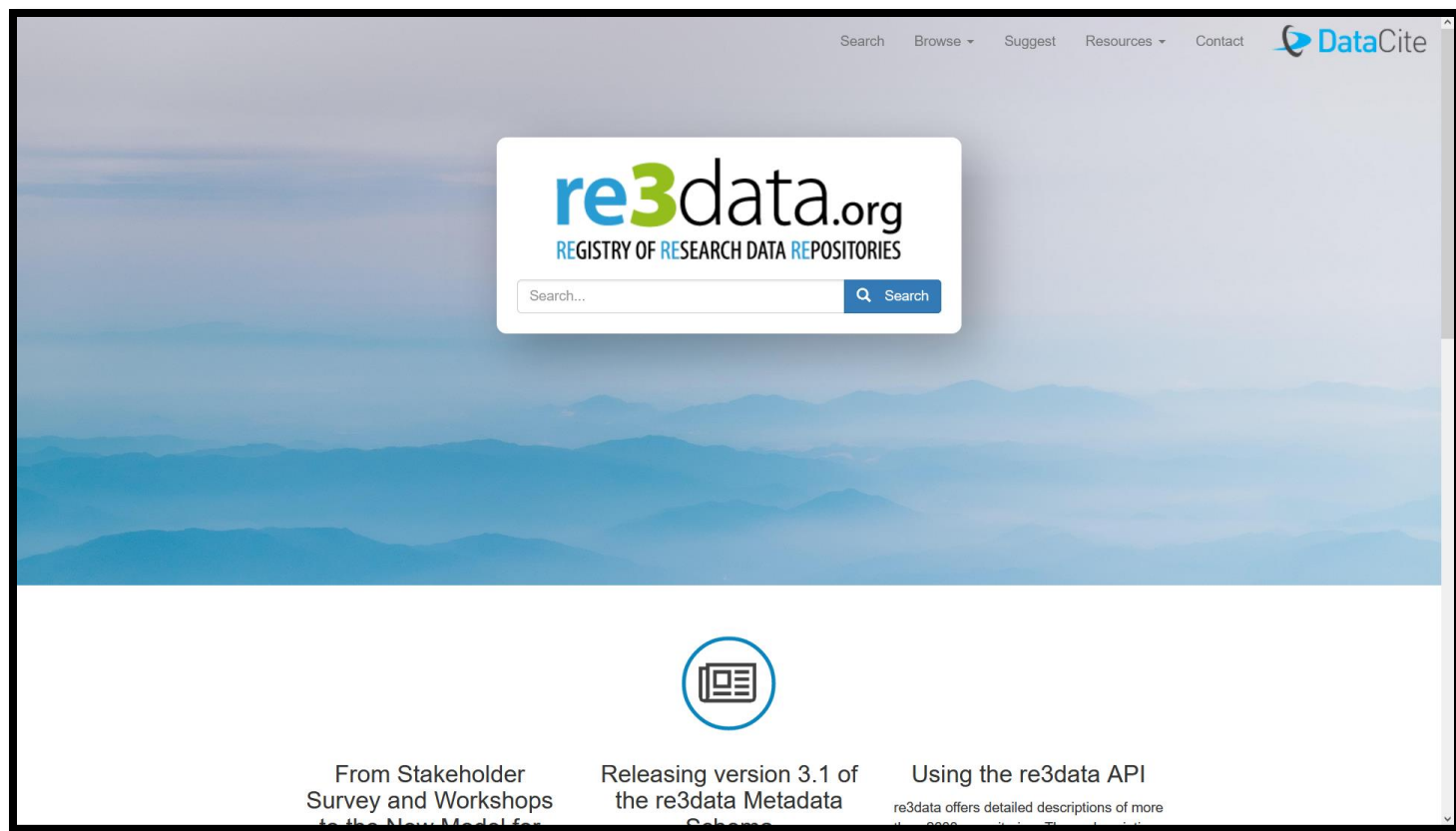
## Disciplinary repository

Offers expertise and experience in data management

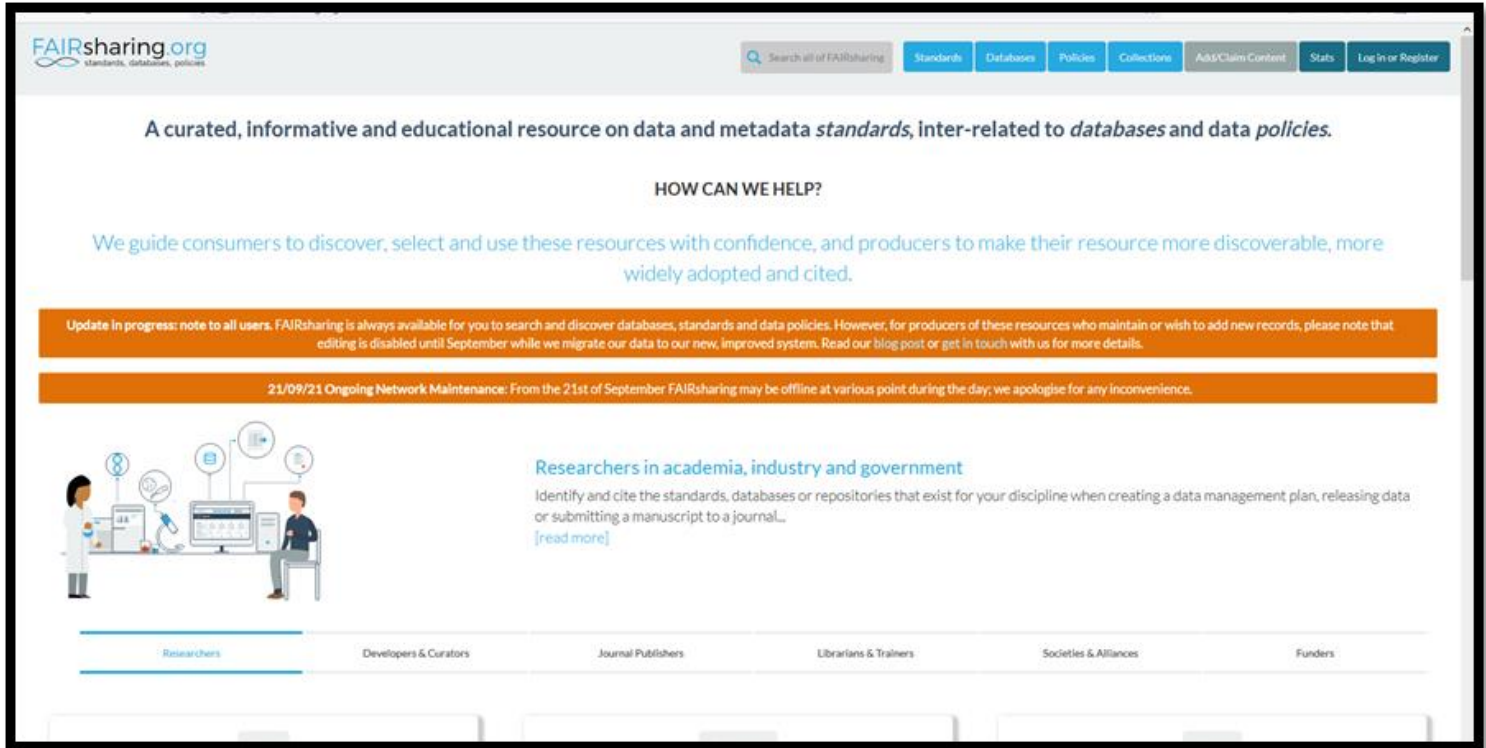
Likely to accept complete data sets

Selective in the type of data they accept

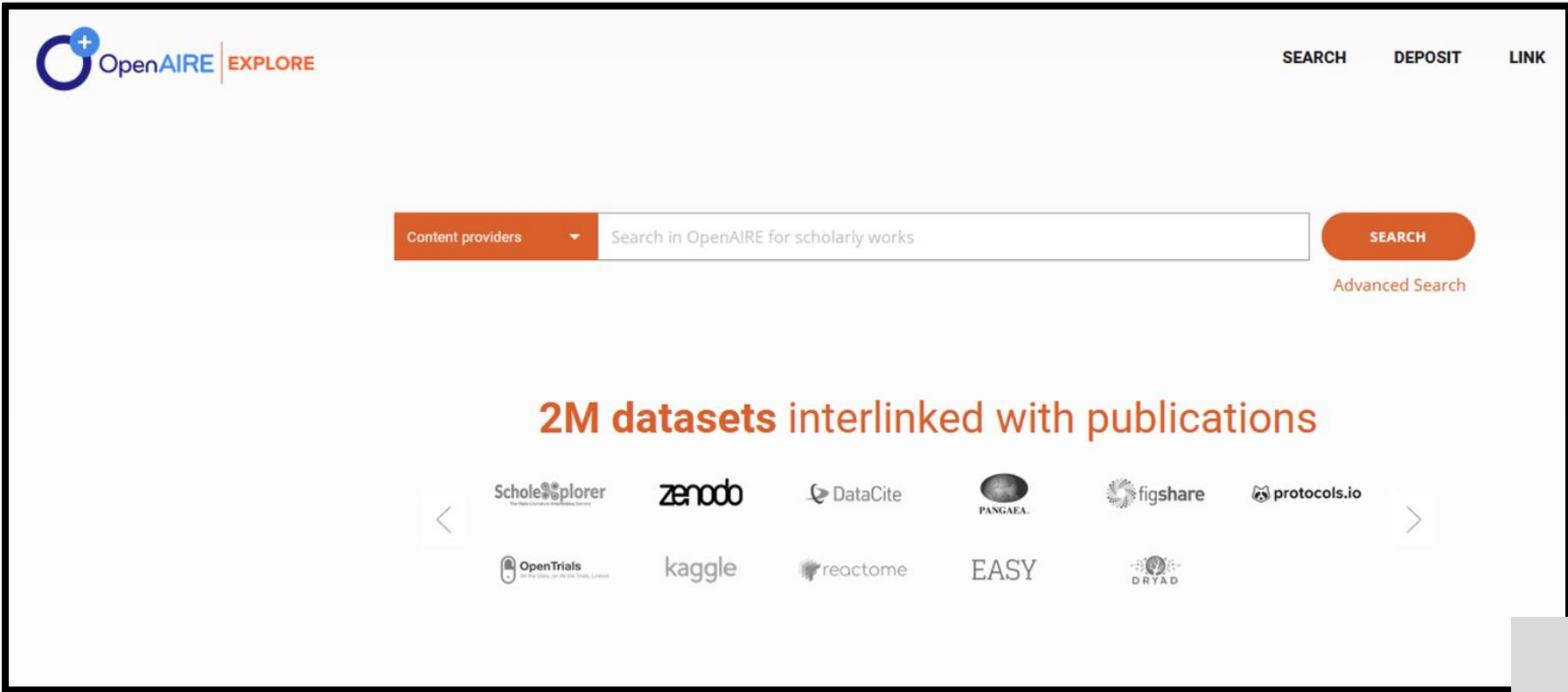
Requires planning and high standards, may incur costs



<https://www.re3data.org/>



<https://fairsharing.org/>



<https://explore.openaire.eu/>

# Journal service for supplementary material

Meet publisher requirements

Data available from published results

It can be costly and risky with data rights

Closed and unlikely access to ensure preservation

SPRINGER NATURE  
 Authors  
 Research data policies and services  
 Research Data Services  
 Research Data Policies FAQs  
 Here you can find answers to frequently asked questions about Research Data Policies. The FAQs are divided in to three main parts:  
 Part 1: Questions about the data policies  
 Part 2: Questions about data repositories

ELSEVIER  
 Research data  
 Data sharing enables others to reuse the results of experiments and supports the creation of new science that is built on previous findings, making the research process more efficient. Data sharing also supports transparency and reproducibility, building trust in science. Elsevier is playing a key role in supporting researchers who want to store, share, discover and reuse data and we are committed to working with other stakeholders to address challenges in making data more effective.  
 Although much research data is disseminated as part of journal articles, a host of other data is not made available through article publication. This policy concerns research data that often underlies, but exists outside of research articles. Publishers can help make this hidden data discoverable and our research data policy this important area. The precise notion of what broadly speaking it refers to the result of observations which are not already published as part of a journal article, processed data, software, algorithms,  
 Quick links  
 • Read more about our Research data activities  
 • Visit the Research Data FAQ

Taylor & Francis Online  
 Make your research more discoverable  
 Why include supplemental material?  
 1. It makes your article more discoverable, giving people another route to find your research.  
 2. Other researchers can cite your supplemental material, increasing the impact of your work.  
 3. Funders are able to identify clear links to data, ensuring you meet your funding requirements.  
 4. Your supplemental data is effectively preserved.  
 What's being looked at  
 Most viewed from 'Long-term high-density cooperation of a site by Octopus bellus'  
 Most shared from 'Molecular evolution of S. populi'  
 What do you need to do?  
 1. Send Taylor & Francis your supplemental material when you submit your manuscript. There's no file size limit.  
 2. We'll automatically upload it to Figshare.  
 3. Every file uploaded to Figshare will have a DOI and will be stored under a Creative Commons License.  
 4. Every piece of supplemental material will be viewable via the Figshare widget on Taylor & Francis Online, hosted on Figshare, and discoverable on search engines.  
 Working with Figshare to make research more discoverable  
 tandf.figshare.com

PLOS ONE  
 TENTH ANNIVERSARY  
 Publish About Browse Search  
 Data Availability  
 The following policy applies to all PLOS journals, unless otherwise noted.  
 PLOS journals require authors to make all data underlying the findings described in their manuscript fully available, with rare exception.  
 When submitting a manuscript online, authors must provide a Data Availability Statement describing the data availability. If the article is accepted for publication, the data availability statement will be published as part of the article.  
 Refusal to share data and related metadata and methods in accordance with this policy will be grounds for rejection. Editors encourage researchers to contact them if they encounter difficulties in obtaining data for publication. If restrictions on access to data come to light after publication, we reserve the right to restrict access to the data, or in extreme cases to retract the publication.  
 Methods acceptable to PLOS journals with respect to data sharing are listed below, accompanied by explanatory notes. If authors use a method that is not listed, they must indicate in their data availability statement and how to follow best practices in their field. If authors use a method that is not listed, this source must be credited as appropriate. Authors who do not follow the policy, or readers who have difficulty accessing data, are encouraged to contact the journal editor. For broader questions about the PLOS data availability policy, contact data@plos.org.  
 The data policy was implemented on March 3, 2014. Any paper submitted before that date will be grandfathered under the previous policy.

Copernicus.org  
 Experimental data policy  
 Information about our data policy and experimental data you need to include  
 Find out more information about our data policy and the experimental data you should include for the characterization of new compounds, X-ray crystallography and macromolecular structures.  
 On this page  
 • Data policy  
 • Characterization of new compounds  
 • X-Ray crystallography  
 • Macromolecular structure and sequence data  
 • System models  
 Data policy  
 Data requirements for submission  
 On submission of a manuscript authors should provide all data required to understand and verify the research presented in the article. This includes the following data types:  
 • Raw data  
 • Processed data  
 • Software and code  
 • System models  
 • Molecular structure and sequence data should be deposited in an appropriate repository.



nature publishing group

"[...] authors are **required** to make materials, data and associated protocols promptly available to readers without undue qualifications."



"PLOS journals **require** authors to make all data underlying the findings described in their manuscript fully available without restriction, with rare exception."



"Please find your appropriate data repository in the Registry for Research Data Repositories **re3data.org**."

# Journal service for supplementary material

Meet publisher  
requirements

Data available from  
published results

It can be costly and risky  
with data rights

Closed and unlikely access  
to ensure preservation

The screenshot shows the PLOS MEDICINE website. At the top, there are navigation links for BROWSE, PUBLISH, and ABOUT, along with a search bar containing the word "SEARCH" and a magnifying glass icon. Below the navigation is the PLOS MEDICINE logo. On the left side, there is a vertical menu with links: Introduction, Minimal Data Set Definition, Acceptable Data Sharing Methods, Acceptable Data Access Restrictions, Unacceptable Data Access Restrictions, FAQs, and PLOS Data Advisory Board. The main content area is titled "Data Availability" and contains a grey box with the text: "The following policy applies to all PLOS journals, unless otherwise noted." Below this is the "Introduction" section, which states: "PLOS journals require authors to make all data necessary to replicate their study's findings publicly available without restriction at the time of publication. When specific legal or ethical restrictions prohibit public sharing of a data set, authors must indicate how others may obtain access to the data." It then explains that authors must provide a Data Availability Statement and lists acceptable data sharing methods. A list of five points follows: validation, reproducibility, archiving, burden reduction, and citation/linking. The "Minimal Data Set Definition" section is partially visible at the bottom.

give  
concrete  
examples

# Data availability policy - publishers

Scenarios:

- **send the dataset to the publisher** and the publisher publishes the dataset online.
- the publisher asks the author to **deposit the dataset in a trusted repository** and to notify the publisher.
- the publisher asks the author to **give contact information** for those who wish to have access to the data.

The requirements are generally found on the journal's website.

*A number of journals have a specific Data Availability or Data Archiving Policy*

# Data paper Journals

- Scientific Data (Nature)
  - <https://www.nature.com/sdata>
- Data in brief (Elsevier)
  - <https://www.journals.elsevier.com/data-in-brief/>
- Data (MDPI)
  - <https://www.mdpi.com/journal/data>
- Patterns (bio data intensive science)
  - <https://www.cell.com/patterns>



Data in Brief

> Open Access



*data*



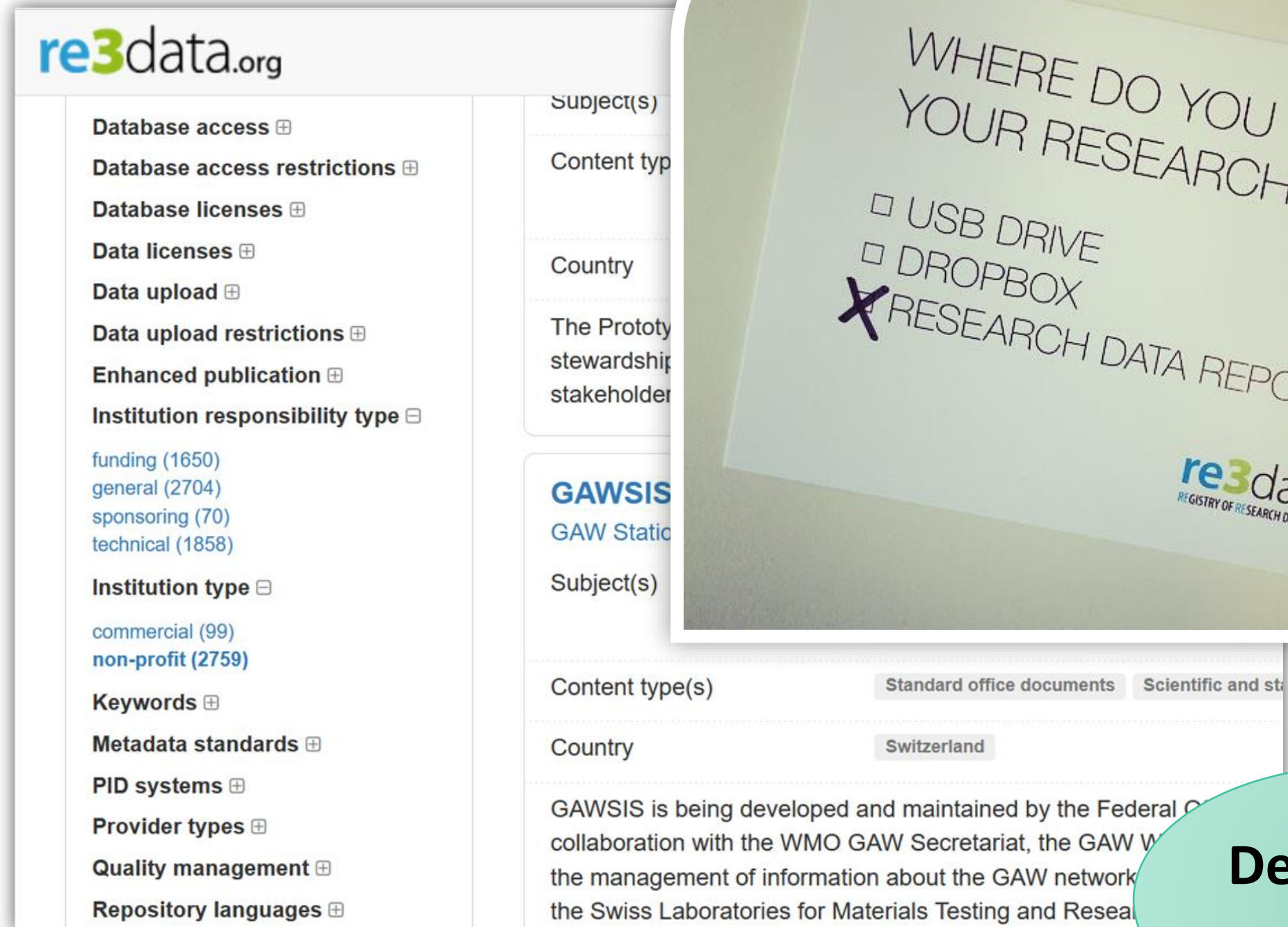
# Institutional data repository

Accept various types of data, ensure long-term access

More reliable and there will be no costs

May not offer long-term sustainable access

May not have disciplinary metadata



The screenshot shows the re3data.org website interface. On the left, there is a sidebar with various search filters such as 'Database access', 'Data licenses', and 'Institution type'. The main content area displays search results for 'GAWSIS' in Switzerland, including details about its content type and funding. A sticky note is overlaid on the right side of the screenshot, containing the text: 'WHERE DO YOU STORE YOUR RESEARCH DATA?' followed by a list of options: 'USB DRIVE', 'DROPBOX', and 'RESEARCH DATA REPOSITORY' (which is marked with a large 'X'). The re3data.org logo is visible at the bottom of the sticky note.

Demo your repo





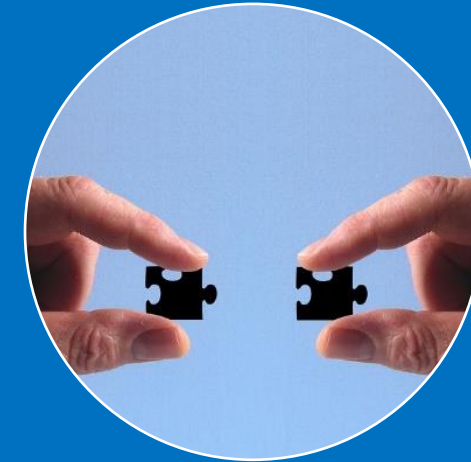
## SHARE

Promote data sharing and the practice of Open Science.



## PUBLISH

Make data available for reuse and generate greater impact.



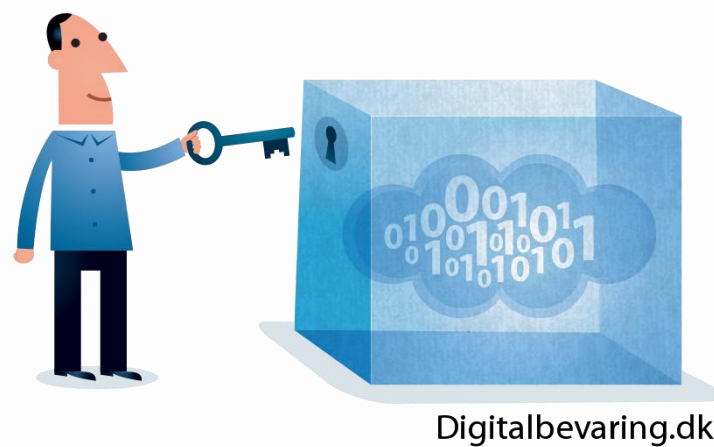
## MANAGE

Ensure good documentation and data management practices

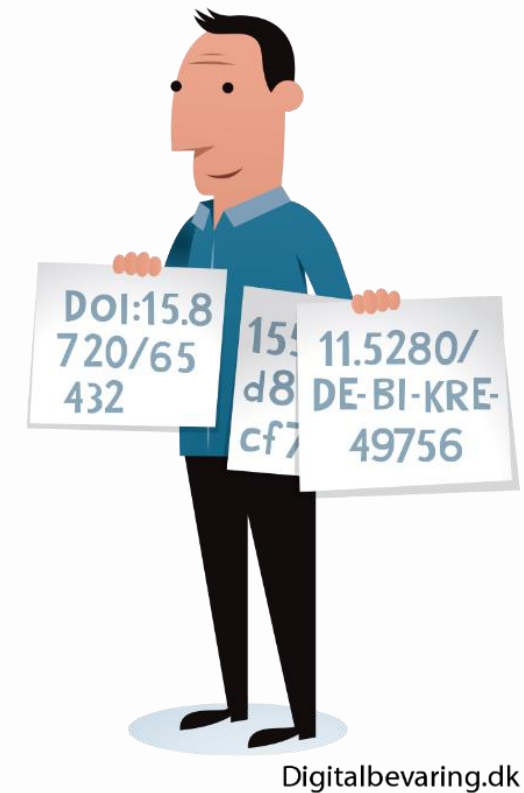


# DataRepositóriUM / Dataverse highlights

## SECURE DATA MANAGEMENT.



## TRACK CHANGES.



## EFFECTIVE SHARING.

## LONG-TERM ACCESS AND PRESERVATION.

# DataRepositóriUM / Dataverse highlights

**ORGANIZATION AND  
COMPATIBILITY.**



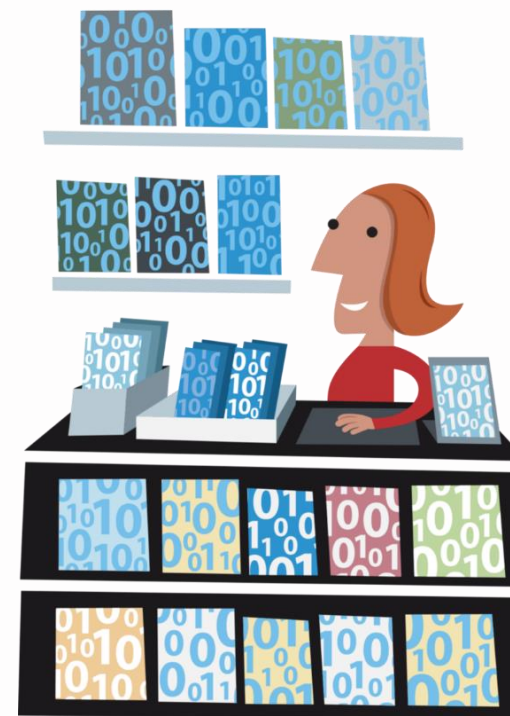
Digitalbevaring.dk



Digitalbevaring.dk

**SAVE TIME.**

**INCREASE  
RESEARCH VISIBILITY.**



Digitalbevaring.dk



Digitalbevaring.dk

**MEET GRANT  
REQUIREMENTS.**

# DataRepositóriUM in practice

The screenshot shows the DataRepositóriUM interface. At the top, there's a navigation bar with 'Add Data', 'Search', 'User Guide', 'Support', 'Sign Up', and 'Log In'. Below that, the logo for 'data RepositóriUM' and the affiliation 'CECS Centro de Estudos de Comunicação e Sociedade (Universidade do Minho)' are visible. The main content area displays the dataset title, a 'Version 2.1' badge, and a 'Cite Dataset' button. A 'Dataset Metrics' box shows '17 Downloads'. The 'Description' section provides a detailed summary of the data collection process. Below that, 'Subject' (Social Sciences) and 'Keyword' (15 de outubro, incêndios, informação, média online, fires, information, online media) are listed. At the bottom, there's a 'Files' section with three downloadable files, each with a 'Download' button.

DOI

10.34622/datarepositorium/

CITATION

Santos, Luís António; Mourão, Marisa; Conrado Filho, Francisco, 2019, "A presença dos incêndios 15 de outubro de 2017 nos média online: peças publicadas por 15 meios de comunicação (entre 15 e 31 de outubro) e interações no Facebook", <https://doi.org/10.34622/datarepositorium/QUV6OP>, Repositório de Dados da Universidade do Minho, V2, UNF:6:IJ9a1z0kLZlr0mRmuhf4Lw== [fileUNF]

Cite Dataset

Learn about [Data Citation Standards](#).

TERMS OF USE & CONTROLLED ACCESS

Terms of Use

Waiver

Our [Community Norms](#) as well as good scientific practices expect that proper credit is given via citation. Please use the citation above, generated by the Dataverse.

No waiver has been selected for this dataset.

Terms of Use



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).

Guestbook

Guestbook

# Generic repository

Reach a wider audience.

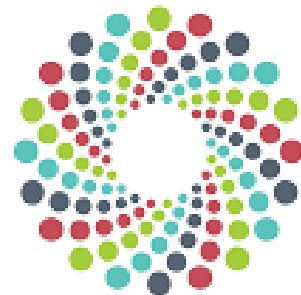
Accepts several types, suitable for interdisciplinary data

Usually only simple metadata is available

No editorial control over the quality of deposited materials



# DRYAD



# figshare

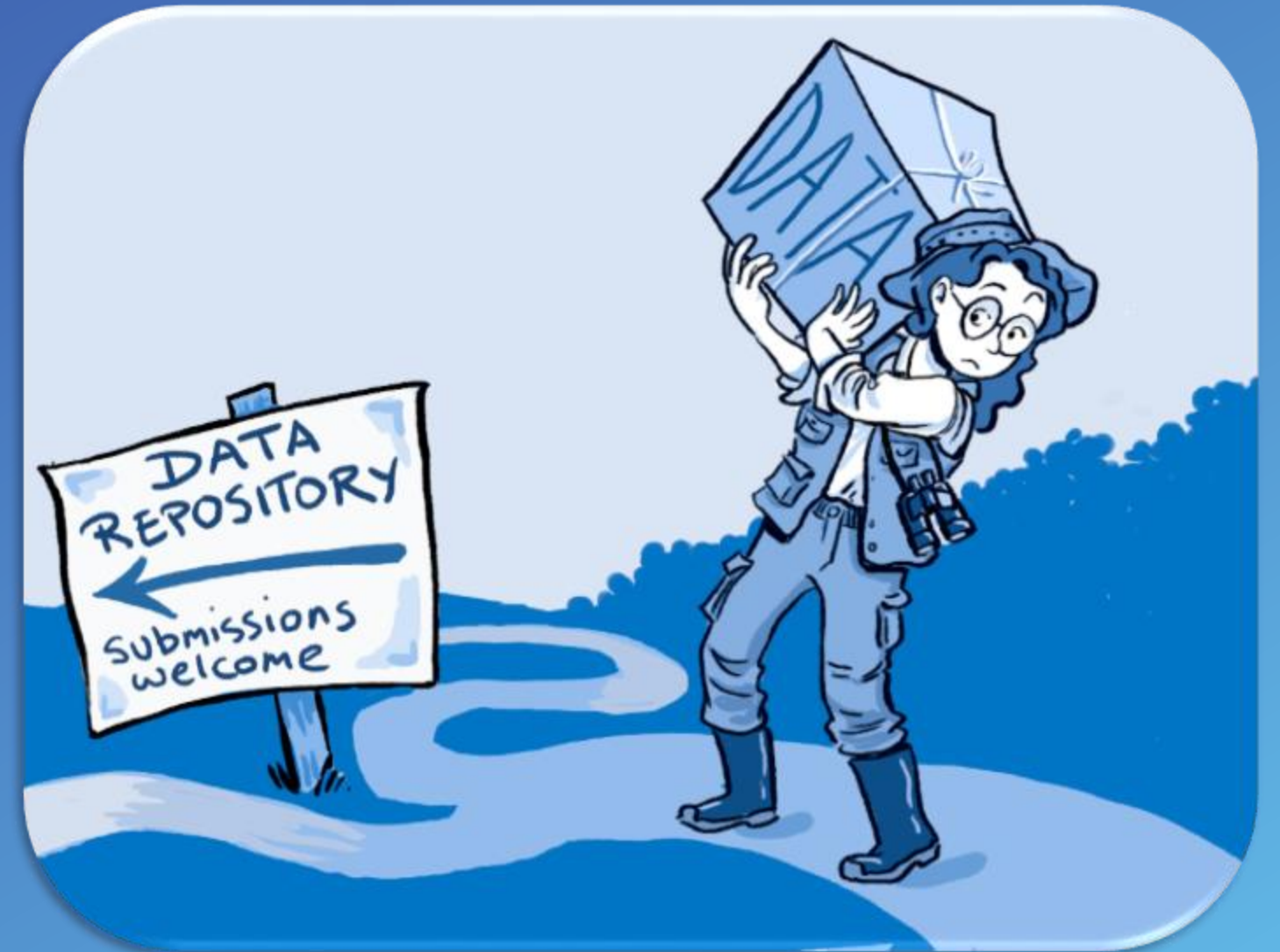


# Cross-disciplinary repositories

Long tail of research data



zenodo



# Zenodo

- **Catch all repository** (CERN and OpenAIRE)
- Free **DOIs** for citation and enable **credit** mechanisms
- Enables tracking of usage (downloads and views) for **credit**
- Citable products are **findable**, reusable, therefore enable degrees of **R\* ness**

A screenshot of a Zenodo record page. The page header includes the Zenodo logo, a search bar, and navigation links for "Upload" and "Communities". The user profile "emma.lazzeri@isti.cnr.it" is visible in the top right. The record title is "gdup: a big graph entity deduplication system - Release 1.0", dated February 17, 2017. It shows 18 views and 1 download. The authors are Claudio Atzori and Paolo Manghi. The record is categorized as "Software" and "Open Access". A red box highlights the following metadata: Publication date: February 17, 2017; DOI: 10.5281/zenodo.292980; Keyword(s): workflow, big data, entity resolution, deduplication, record linkage, graph, information space; Grants: European Commission, OpenAIRE2020 - Open Access Infrastructure for Research in Europe 2020 (643410); Related identifiers: Supplement to <https://github.com/claudioatzori/dnet-gdup/tree/1.0>; License (for files): Apache License 2.0. The background shows parts of the Zenodo interface, including a sidebar with "ub" and "AIRE" logos and a list of related records.

# Disciplinary repository

Offers expertise and experience in data management

Likely to accept complete data sets

Selective in the type of data they accept

Requires planning and high standards, may incur costs

The screenshot shows the re3data.org website, which is a registry of research data repositories. At the top, there is a navigation bar with links for Search, Browse, Suggest, Resources, and Contact, along with the DataCite logo. The main heading is "re3data.org" with the subtitle "REGISTRY OF RESEARCH DATA REPOSITORIES". Below this is a search bar with the text "Search..." and a "Search" button. The central content area is titled "Where should I deposit my data?" and features a grid of repository logos. At the bottom of the grid is the BioStudies logo.

Where should I deposit my data?

- ENA (European Nucleotide Archive)
- ArrayExpress
- European Variation Archive
- BioImage Archive
- EMPIAR
- IDR
- PRIDE (Proteomics IDentifications Database)
- BioModels
- PDBe (Protein Data Bank in Europe)
- MetaboLights
- BioStudies



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<https://dmpportal.biodata.pt/>

The screenshot shows the BioData.pt website interface. At the top, there is a navigation bar with 'BioData.pt' on the left and 'Add Data', 'Search', 'User Guide', 'Support', 'Sign Up', and 'Log In' on the right. Below the navigation bar, the page title is 'Home (biodata.pt)'. A 'Metrics' section shows '0 Downloads'. There are 'Contact' and 'Share' links. A search bar contains the text 'Search this dataverse...' and a 'Find' button, with a link to 'Advanced Search'. The main content area displays search results for 'recolha de material BS'. On the left, there are filters for 'Dataverses (5)', 'Datasets (1)', and 'Files (0)'. Below these are filters for 'Dataverse Category' (Organization or Institution (2), Research Project (2)), 'Publication Year' (2021 (4), 2020 (2)), 'Author Name' (Chaves, Ines (1)), 'Subject' (Agricultural Sciences (4)), and 'Deposit Date' (2020 (1)). The search results list six items, each with a 'Sort' button. The first result is 'recolha de material BS' by Ines Chaves, dated Dec 15, 2021, from the 'Barradas da Serra Dataverse'. The other results are 'Barradas da Serra Dataverse (IBET/ITQB)', 'Cork Oak datasets (IBET/ITQB)', 'COVID-19 Portuguese BioData Portal (biodata.pt)', 'Human BioDataVerse (biodata.pt)', and 'Plant BioDataVerse (biodata.pt)'. At the bottom, there is a copyright notice 'Copyright © 2022' and a footer for 'Powered by The Dataverse Project v. 4.20 build 413-4e07b62'.

Point to community services

## PLATFORMS

### ▼ Data

[Core Data Resources](#)

[Deposition Databases](#)

### ▶ Tools

[Compute](#)

### ▶ Interoperability

### ▶ Training

## Data Platform

The goal of the ELIXIR Data Platform is to drive the use, re-use and value of life science data. It aims to do this by providing users with robust, long-term sustainable data resources within a coordinated, scalable and connected data ecosystem.

Bioinformaticians and life science researchers in both academic and industrial settings need confidence in the sound governance, life cycle management, and long-term sustainability of those data resources.

They also need open access to technically and scientifically excellent data resources for effective data discovery, deposition, and re-use. The ELIXIR Data platform promotes Open Access as a core principle for publicly funded research. ELIXIR resources ideally reflect this commitment and have terms of use or a licence that enables the reuse and remixing of data (see [Open Definition](#) for a list of open licenses).

### Platform highlights

- [ELIXIR Core Data Resources](#): European data resources that are of fundamental importance to research in the life sciences and are committed to the long-term preservation of data.
- [ELIXIR Deposition Databases](#): repositories recommended for the deposition of life sciences experimental data.
- [Data resource services](#): this list is updated as Nodes finalise or review their Service Delivery Plans (see [How countries join](#)).

<https://elixir-europe.org/platforms/data>





# TRUSTWORTHY REPOSITORIES

**Certification Tools for repository auditing & certification.**

- CoreTrustSeal (CTS)
- Nestor Seal;
- ISO 16363: 2013



Digitalbevaring.dk

Filter

Reset all

- Subjects
- Content Types
- Countries
- AID systems
- API
- Certificates
  - CLARIN certificate B (23)
  - CoreTrustSeal (115)
  - DIN 31644 (1)
  - DSA (2)
  - RatSWD (1)
  - Trusted Digital Repository (1)
  - WDS (1)
  - other (3)
- Data access
- Data access restrictions
- Database access
- Database access restrictions
- Database licenses
- Data licenses
- Data upload
- Data upload restrictions
- Enhanced publication

Search...

Search

Toggle short help

← Previous 1 2 3 4 5 Next →

Sort by

Found 115 result(s)

### National Geoscience Data Centre

NGDC



Subject(s)

Geosciences (including Geography) Atmospheric Science and Oceanography Water Research

Geophysics Natural Sciences Geophysics and Geodesy

Content type(s)

Standard office documents Structured text Raw data Images

Scientific and statistical data formats Archived data

Country

United Kingdom

The BGS is a data-rich organisation with over 400 datasets in its care; including environmental monitoring data, digital databases, physical collections (borehole core, rocks, minerals and fossils), records and archives. Our data is managed by the National Geoscience Data Centre.

### Woods Hole Open Access Ser

WHOAS

The research data repository is either certified or supports a repository standard



Subject(s)

Oceanography Geophysics and Geodesy Life Sciences Atmospheric Science and Oceanography

# THANKS

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**Web**

[www.openaire.eu](http://www.openaire.eu)

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**Email**

[pedro.principe@usdb.uminho.pt](mailto:pedro.principe@usdb.uminho.pt)

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**Twitter**

[@openaire\\_eu](https://twitter.com/openaire_eu)  
[@pedroprincipe](https://twitter.com/pedroprincipe)



# Services and tools across the Data Curation Lifecycle

# HIGHLIGHT TOOLS FOR THE STAGES OF THE RESEARCH DATA LIFE CYCLE



<https://dmeg.cessda.eu/Data-Management-Expert-Guide>



[https://rdmkit.elixir-europe.org/data\\_life\\_cycle](https://rdmkit.elixir-europe.org/data_life_cycle)



**My own practices, worries, challenges...  
and the tools I use for  
data management in the research life cycle**







*Showcase tools, ask  
colleagues to demo...*

## **A world of tools... supporting RDM**

<https://rdmkit.elixir-europe.org/researcher#national-resources-button>

<https://dmeg.CESSDA.eu/>

<https://datamanagement.hms.harvard.edu/analyze/electronic-lab-notebooks>

...



# Planning research



**PLANNING RESEARCH**

**Planning research:**

- . Design research
- . Plan data management
- . Plan consent for sharing
- . Plan data collecting, processing protocols and templates
- . Explore existing data sources

<https://ukdataservice.ac.uk/learning-hub/research-data-management/>

<https://youtu.be/-wjFMMQD3UA>

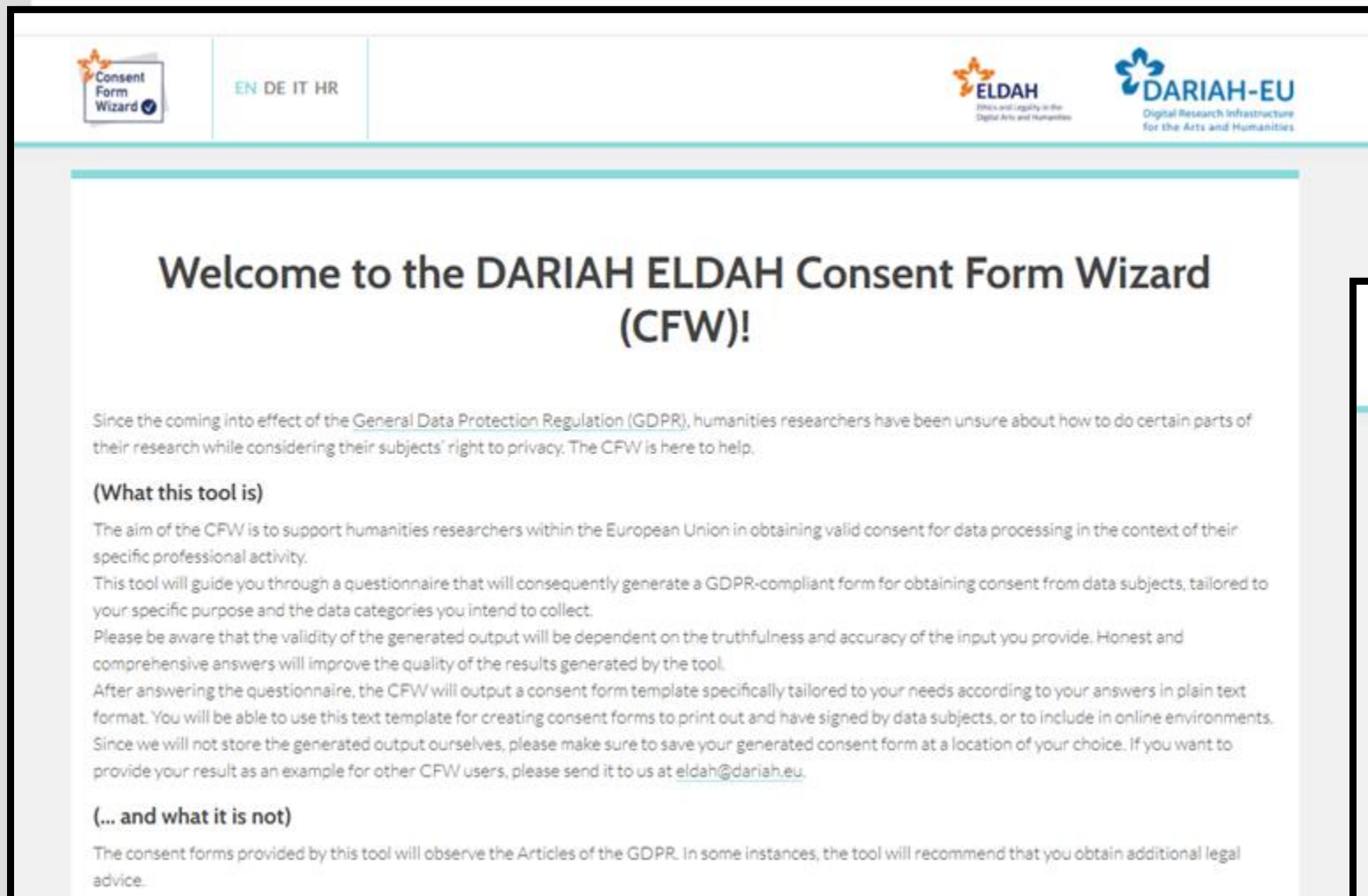


# DMPs



- DMPonline  
<https://dmponline.dcc.ac.uk/>
- ARGOS  
<https://argos.openaire.eu/>
- OpenDMP  
<https://gitlab.eudat.eu/dmp/OpenAI-RE-EUDAT-DMP-service-pilot>
- Data Stewardship Wizard  
<https://ds-wizard.org>
- RDMO - RDM Organiser  
<https://rdmorganiser.github.io/en/>
- DMPTool  
<https://dmptool.org>
- ezDMP  
<https://ezdmp.org>
- easyDMP  
<https://easydmp.eudat.eu>
- DMP ARIADNEplus  
<https://vast-lab.org/dmp/ariadneplus/form/>

# Suggestion for preparing Consent forms



The screenshot shows the top navigation bar with the 'Consent Form Wizard' logo, language options (EN, DE, IT, HR), and logos for ELDAH (Ethics and Legality in the Digital Arts and Humanities) and DARIAH-EU (Digital Research Infrastructure for the Arts and Humanities). The main heading reads 'Welcome to the DARIAH ELDAH Consent Form Wizard (CFW)!'. Below this, a paragraph explains the tool's purpose in light of the GDPR. The page is divided into two sections: '(What this tool is)' and '(... and what it is not)'. The first section describes the tool's aim to support researchers in obtaining valid consent and provides instructions on how to use the questionnaire. The second section clarifies that the tool's output is based on user input and does not constitute legal advice.

**Welcome to the DARIAH ELDAH Consent Form Wizard (CFW)!**

Since the coming into effect of the General Data Protection Regulation (GDPR), humanities researchers have been unsure about how to do certain parts of their research while considering their subjects' right to privacy. The CFW is here to help.

**(What this tool is)**

The aim of the CFW is to support humanities researchers within the European Union in obtaining valid consent for data processing in the context of their specific professional activity.

This tool will guide you through a questionnaire that will consequently generate a GDPR-compliant form for obtaining consent from data subjects, tailored to your specific purpose and the data categories you intend to collect.

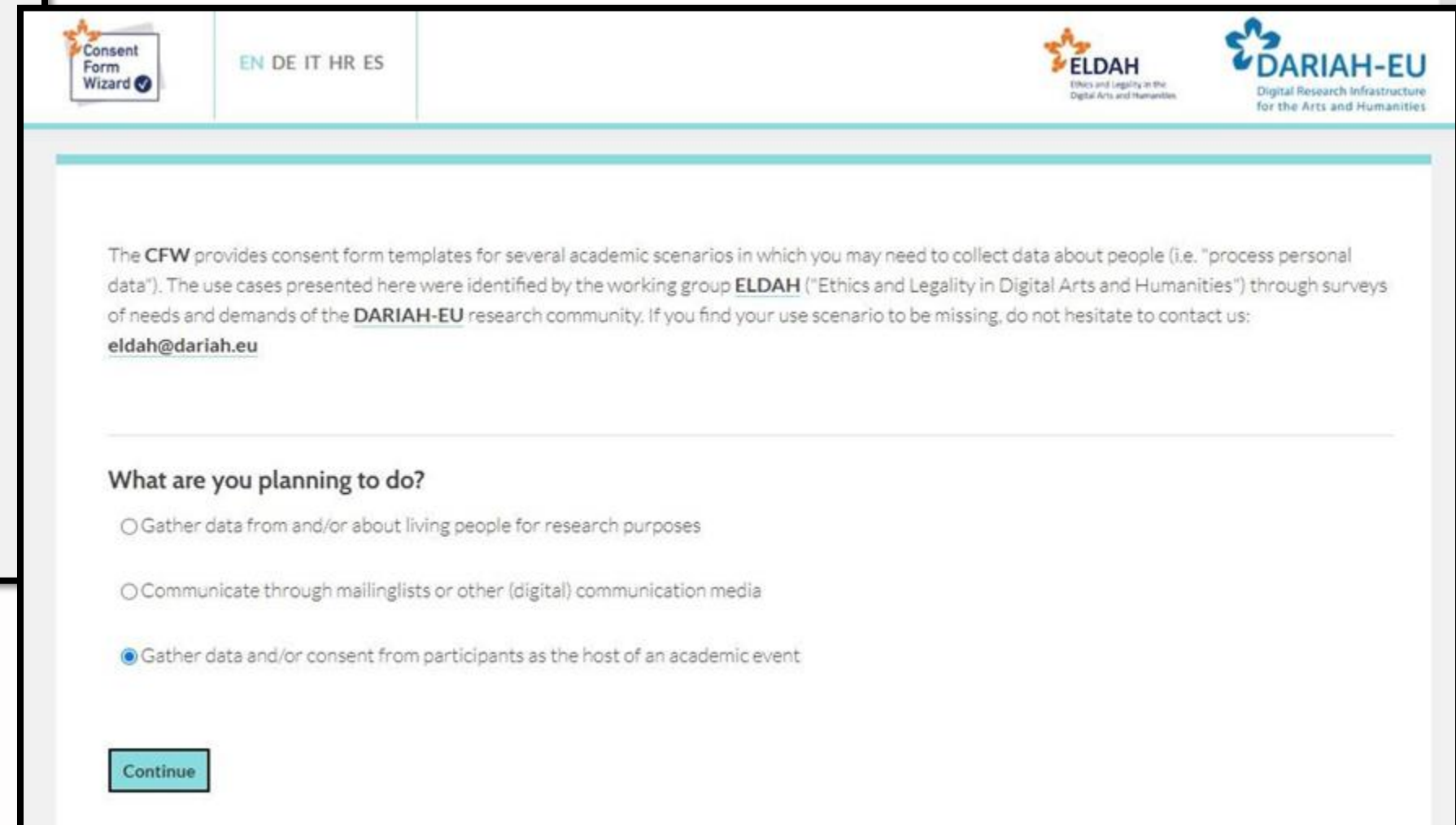
Please be aware that the validity of the generated output will be dependent on the truthfulness and accuracy of the input you provide. Honest and comprehensive answers will improve the quality of the results generated by the tool.

After answering the questionnaire, the CFW will output a consent form template specifically tailored to your needs according to your answers in plain text format. You will be able to use this text template for creating consent forms to print out and have signed by data subjects, or to include in online environments. Since we will not store the generated output ourselves, please make sure to save your generated consent form at a location of your choice. If you want to provide your result as an example for other CFW users, please send it to us at [eldah@dariah.eu](mailto:eldah@dariah.eu).

**(... and what it is not)**

The consent forms provided by this tool will observe the Articles of the GDPR. In some instances, the tool will recommend that you obtain additional legal advice.

<https://consent.dariah.eu/>



This screenshot shows the 'What are you planning to do?' section of the CFW. It features the same navigation bar as the previous screenshot. The text explains that the CFW provides consent form templates for various academic scenarios. It lists three use cases with radio button options: 'Gather data from and/or about living people for research purposes', 'Communicate through mailinglists or other (digital) communication media', and 'Gather data and/or consent from participants as the host of an academic event'. The third option is selected. A 'Continue' button is located at the bottom of the section.

The **CFW** provides consent form templates for several academic scenarios in which you may need to collect data about people (i.e. "process personal data"). The use cases presented here were identified by the working group **ELDAH** ("Ethics and Legality in Digital Arts and Humanities") through surveys of needs and demands of the **DARIAH-EU** research community. If you find your use scenario to be missing, do not hesitate to contact us: [eldah@dariah.eu](mailto:eldah@dariah.eu)

**What are you planning to do?**

- Gather data from and/or about living people for research purposes
- Communicate through mailinglists or other (digital) communication media
- Gather data and/or consent from participants as the host of an academic event

[Continue](#)

# COLLECTING, PROCESSING... DATA



## COLLECTING DATA

### Collecting data:

- . Collect data
- . Capture data with metadata
- . Acquire existing third party data

## PROCESSING AND ANALYSING DATA

### Processing & analysing data:

- . Enter, digitize, transcribe and translate data
- . Check, validate, clean, anonymize
- . Derive data
- . Describe and document data
- . Manage and store data
- . Analyse and interpret data
- . Produce research outputs
- . Cite data sources

# ELabNotebooks

<https://doi.org/10.5281/zenodo.4723752>

HARVARD MEDICAL SCHOOL | DATA MANAGEMENT WORKING GROUP | DATAMANAGEMENT.HMS.HARVARD.EDU



## Spreading the Word on Going Digital in the Lab

### The Data Management Working Group

The Harvard Medical School (HMS) Data Management Working Group (DMWG) was established in response to identified unmet needs in biomedical research in the HMS community. One subgroup was created to study and support researchers' interest in and use of Electronic Lab Notebooks

### The Electronic Lab Notebook Matrix

The matrix table compares Electronic Lab Notebook (ELN) options, helping researchers identify appropriate solutions. We sent a survey to 26 vendors, and created a matrix based on the responses. This matrix does not recommend any particular solution(s), but serves as an educational tool and decision map for librarians and researchers alike to navigate the growing ELN market. The group continuously processes requests for updates to current matrix information, as well as inquiries to add additional ELNs. Mentions of this matrix on Twitter, in Nature, and Wikipedia show that the wider community welcomes resources that make research data management solutions more findable, accessible, interoperable, and reusable (FAIR).



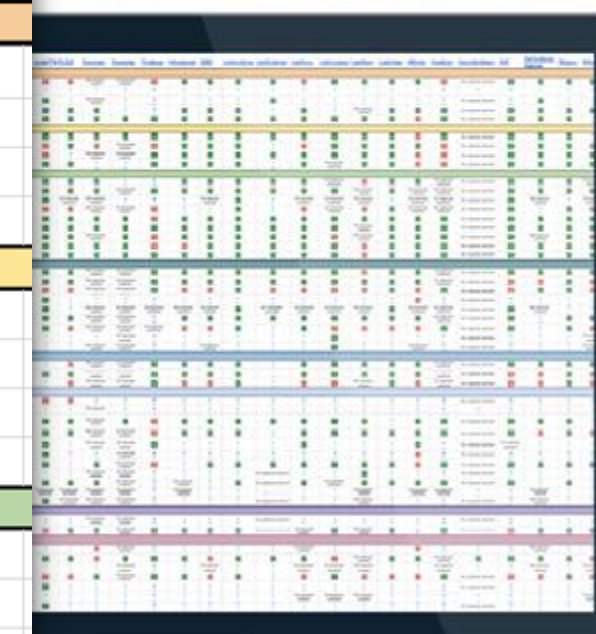
Research Data Management Working Group  
Harvard Longwood Medical Area

Yes  
 No  
 \* Additional Information available on the ELN subpage

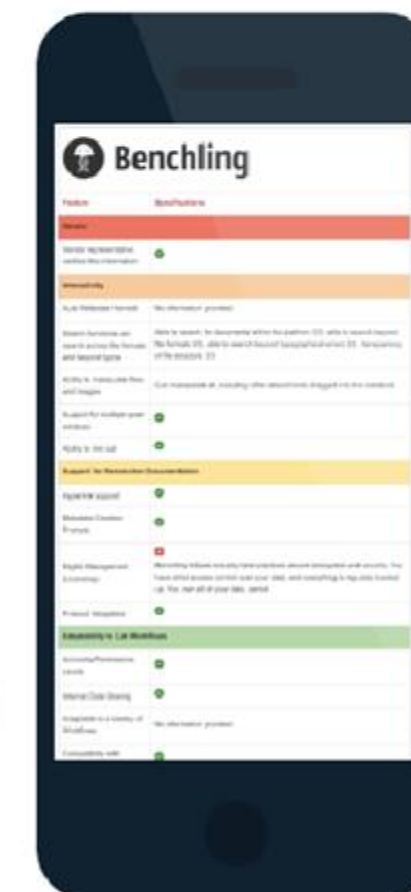
Page last updated 2021-04-19

Features	Specifications									
	<a href="#">Arxspan</a>	<a href="#">Benchling</a>	<a href="#">BIOVIA</a>	<a href="#">Chemotion</a>	<a href="#">Confluence</a>	<a href="#">Docollab</a>	<a href="#">eCLabNote</a>	<a href="#">eLabFTW</a>	<a href="#">eLabJournal</a>	<a href="#">ELOG</a>
<b>Interactivity</b>										
Search functions can search across file formats and beyond types	✓	*	*	*	*	*	No response received	*	*	*
Ability to manipulate files and images	✓	*	No response received	*	*	*	No response received	✓	✓	*
Support for multiple open windows	✓	✓	*	✓	✓	✓	No response received	✓	✓	✓
Ability to link out	✓	✓	No response received	✓	*	✓	✓	✓	✓	✓
<b>Support for Researcher Documentation</b>										
Hyperlink support	✓	✓	No response received	✓	✓	✓	✓	✓	✓	✓
Metadata Creation Prompts	✗	✓	No response received	✓	✗	✓	No response received	✗	✗	✓
Rights Management (licensing)	✓	✗	No response received	*	*	✓	No response received	✗	✓	*
Protocol Integration	✓	✓	✓	✓	✓	✓	No response received	✓	✓	✓
<b>Adaptability to Lab workflows</b>										
Accounts/Permissions Levels	✓	✓	No response received	✓	*	✓	✓	✓	✓	✓
Internal Data Sharing	✓	✓	*	✓	*	✓	No response received	✓	✓	✓
Adaptable to a Variety of Workflows	*	*	No response received	No response received	*	*	No response received	✓	No response received	No response received
Compatibility with authoring tools	*	✓	No response received	*	*	✓	No response received	✗	✓	✗
Windows Compatible	✓	✓	No response received	✓	✓	✓	✓	✓	✓	✓
Macintosh Compatible	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Linux Compatible	✓	✓	✗	✓	✓	✓	No response received	✓	✓	✓
Android Compatible	✓	✓	✓	✓	✓	✓	No response received	✓	✓	✓

HARVARD.EDU/ELECTRONIC-LAB-NOTEBOOKS



Electronic laboratory notebook.  
41586-018-05895-3



# RDM Support webpages in institutional websites

The screenshot shows the Longwood Research Data Management website. The header includes the Longwood logo and a search bar. The navigation menu has links for About, Plan & Design, Collect & Analyze, Store & Evaluate, Share & Publish, and Training & Events. The main heading is 'Store & Evaluate'. On the left, a sidebar lists sub-topics: Storage Options, Data Safety, Data Security, Data Retention, Archives and Records Management, and Data Destruction. The main content area features a 'Storage Overview' section with a paragraph about the Biomedical Data Lifecycle and a diagram. The diagram shows a circular flow with 'STORE & MANAGE' at the top, 'EVALUATE & ARCHIVE' on the right, and 'Data Destruction', 'Archives & Records Mgmt.', 'Data Retention', and 'Data Security' at the bottom. A yellow arrow points from the bottom towards the top.

**LONGWOOD**  
RESEARCH DATA MANAGEMENT

Search

[About](#) [Plan & Design](#) [Collect & Analyze](#) [Store & Evaluate](#) [Share & Publish](#) [Training & Events](#)

## Store & Evaluate

### Store & Evaluate

- Storage Options
- Data Safety
- Data Security
- Data Retention
- Archives and Records Management
- Data Destruction

### Storage Overview

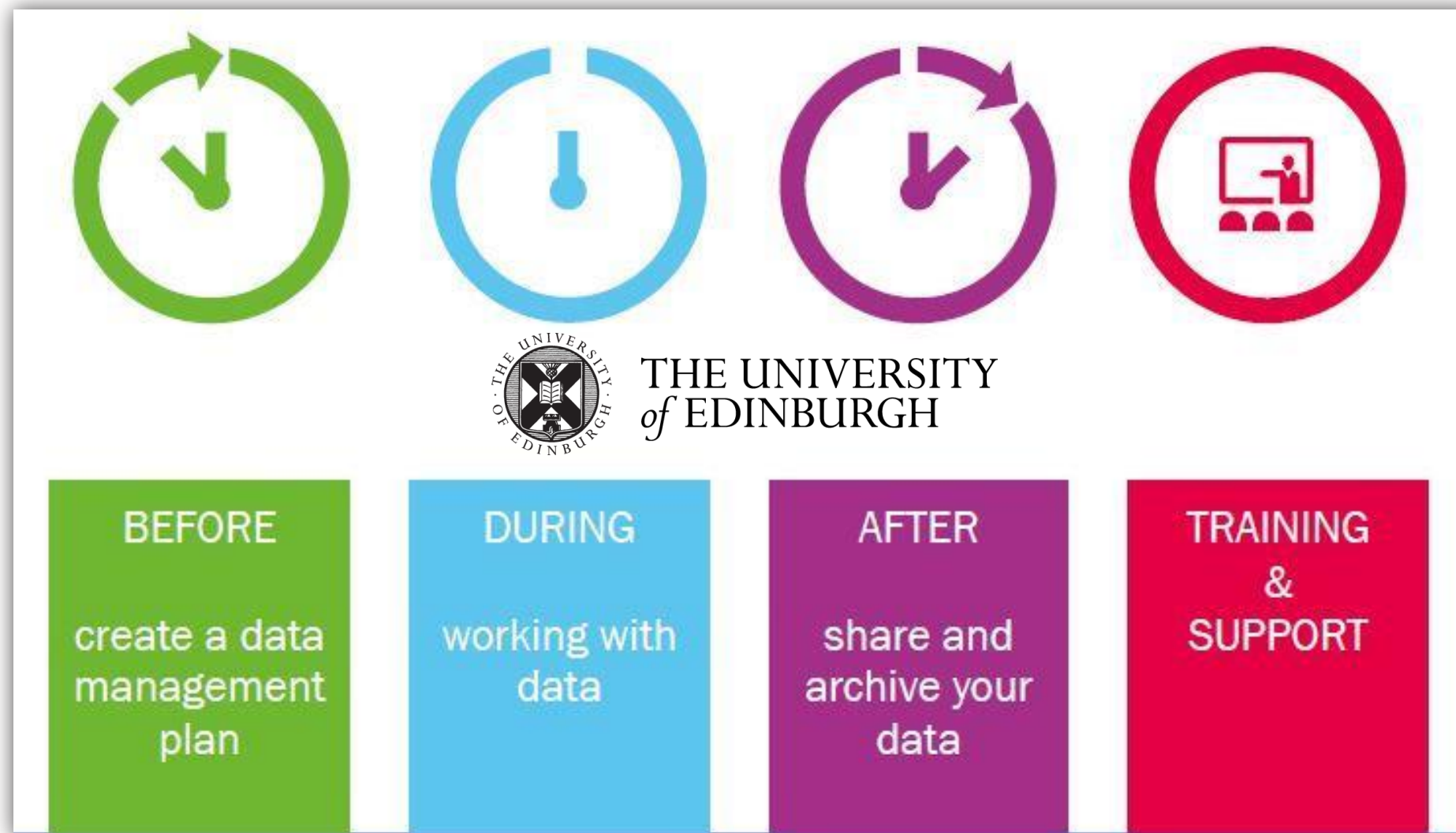
Every stage of the Biomedical Data Lifecycle centers around the management of data storage. Proper storage maintenance throughout the lifecycle is imperative to ensure data remains secure and adheres to recommended safety protocols.

Research requires increasingly complex arrangements for the storage and transmission of research data. Robust data privacy and security planning is needed to protect the privacy of research subjects and to secure sensitive, personally identifiable information.

- In the [Plan & Design](#) stage, you may be asked to

The diagram illustrates the Biomedical Data Lifecycle. It features a large grey circle at the top labeled 'STORE & MANAGE' with sub-points 'Storage Options' and 'Data Safety'. Below it is a yellow arrow pointing upwards and to the right, labeled 'EVALUATE & ARCHIVE'. At the bottom of the arrow are four sub-points: 'Data Destruction', 'Archives & Records Mgmt.', 'Data Retention', and 'Data Security'.

# Research work life cycle (simplified)



<https://www.ed.ac.uk/information-services/research-support/research-data-service>

**Before research**

- [Reusing existing data](#)
- [Preparing a Data Management Plan \(DMP\)](#)
- [Costing RDM](#)

**During research**

- [Collecting and organizing data](#)
- [Documenting data](#)
- [Storing and backing up data](#)
- [Data security](#)

**After research**

- [Preserving data](#)
- [Sharing data](#)
- [Using a data repository](#)
- [FAIR data](#)

GHENT UNIVERSITY

<https://www.ugent.be/en/research/datamanagement>



# SELECTION OF RESOURCES THAT RECOMMEND RDM TOOLS

Third OpenAIRE Train-the-Trainer Bootcamp / Additional resources: RDM tools, toolkits and tools listings  
/ View list



**Additional resources: RDM tools, toolkits and tools listings**

Feel free to add resources (or individual tools) you are using.

# THANKS

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**Web**

[www.openaire.eu](http://www.openaire.eu)

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**Email**

[pedro.principe@usdb.uminho.pt](mailto:pedro.principe@usdb.uminho.pt)

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**Twitter**

[@openaire\\_eu](https://twitter.com/openaire_eu)  
[@pedroprincipe](https://twitter.com/pedroprincipe)

