

Where to disseminate your research data?

0. What is a *repository*?

A *repository* is a digital infrastructure set up to store, share, archive and access researchers' data sets.

1. Why share data in a *repository*?ⁱ



A. Requirement to share research data sometimes imposed by

- Funders
- Scientific Journals
- Institutions and universities

B. Benefits for you

- Citations
- Academic and professional recognition
- New collaborations

C. Benefits for the research community

- Re-usability for teaching
- Easier to find useful data
- Archiving and preserving data for the future
- Possibility of new searches
- More efficient research

D. Bénéfices pour le public

- Opportunities for citizen science
- Economic benefits in the private sector
- Strengthening public confidence in science
- Validation of data in research publications

2. Where to share?



There are several ways to open up your data:

A. Generic data *Repository*

- + Suitable for all types of research data, designed to ensure long-term preservation, provides a DOI for permanent access and referencing
- Check that the terms and conditions are in line with the policy of the funder, journal or institution (copyright, long-term preservation)

B. Disciplinary *Repository*

- + Specialised in one area, offers expertise on storage and use specific to the type of data
- More selective (higher metadata and documentation standards)

C. Institutional *Repository*

- + Long-term access, ensuring compliance with the institution's policy
- Does not always exist, may have less impact on visibility

The following options do not offer sufficient guarantees in the long term. They can be used but should only be used in addition to the above *repositories*.

🌟 Service offered by a journal (supplementary materials)

- No guarantee of long-term sustainability (depending on the publisher), can be expensive (both to deposit and to consult), little flexibility on accepted formats, only for data directly linked to a publication.

🌟 Personal web page

- Need to be maintained, no long-term guarantee, not easy to find.

3. How to share data: FAIR principles



Data FAIRport is an initiative launched in 2014. Its aim is to ensure good conditions for the discovery and reuse of data by both humans and computers.

A. Findable

The data is described with detailed metadata, has a unique and persistent identifier, and is stored and indexed in a searchable system.

B. Accessible

C. The (meta)data can be retrieved with their identifier using an open, free and universal standardised communication protocol. If necessary, the protocol offers an authentication function. The metadata can always be accessed by everybody.

D. Interoperable

The (meta)data uses a formal, accessible, shared and widely applicable language, a FAIR vocabulary, and contains controlled references to other (meta)data.

E. Reusable

The data and metadata are sufficiently described to allow the reuse of the data in future research. This means a clear description of: contents, context and condition of production, variables, units, clear and accessible licence, etc. They respect the standards defined by the scientific community.

4. Finding the right repository: options available



A. Yareta

Yareta is the institutional *repository* of the University of Geneva, developed thanks to the [DLCM project](#) and the [cantonal bill 12146](#). It allows the long-term preservation and online availability of research data according to ISO 14721 and FAIR principles. Each deposited dataset has a DOI. The service is open to researchers from UNIGE, IHEID, HUG and HES-SO Geneva. Free of charge up to 50 GB, then 2 billing options available: 100 CHF/TB/Year of preservation or a single invoice of 2'000 CHF/Tb per upload (*Pay once forever*). Those fees are eligible for funding by the SNSF.



B. Zenodo

Zenodo is a *repository* created in 2013 by OpenAIRE and CERN. It is a general-purpose data repository suitable for all scientific disciplines. It ensures the long-term preservation of deposited data, provides a DOI, offers a choice of licenses, metrics on data usage, etc. The deposit is free. Files can be up to 50GB in size. It is considered FAIR by the SNSF.



C. Re3data.org (Registry of Research Data Repositories)

Re3data.org was created in 2012 and provides an overview of existing *repositories*. This registry contains *repositories* from all academic disciplines.



For each data *repository*, detailed information is listed clarifying the features and options, as well as the organization providing the service. Icons a summing up the features.

Note that each *repository* is reviewed before being included in the registry.

ⁱ Based on: Hole, Brian. *Open Access: Advantages, Funding, Opportunities*. 24 Oct 2012. Available: <https://www.slideshare.net/brianhole/open-access-advantages-funding-opportunities>
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