Where to store your research data?
A guide through the data repository jungle
> Funders such as the SNSF require researchers to publish their data in adequate repositories

> Info under: www.snsf.ch

> Contact us under: researchdata@ub.unibe.ch
Exceptions

> Embargo, Restricted Access, Not Publishing
  — Data Protection Act
  — Copyright Law
  — Legal or confidential clauses

> Any action has to be justified

> The data has to be documented in a repository at any rate
What is a repository?

"A repository is a managed directory for the storage and description of digital objects."

Data lifecycle according to the UK Data Archive: https://www.ukdataservice.ac.uk/manage-data/lifecycle
Repositories and FAIR Data Principles

Repositories are a tool to make data compliant with the FAIR Data Principles

- Findable
- Accessible
- Interoperable
- Reusable
In contrast to personal or project websites, repositories create benefits in terms of:

> Provide for long term preservation
> Allow it to describe your data (metadata) and make it readable by both humans and machines
> Provide for persistent identifier (e.g. DOI)
> Facilitate data sharing
> Increase visibility
Advantages

— Open to all disciplines
— Easy to use

Examples

— Zenodo (CERN)
— Harvard Dataverse
— Dryad
Types of Repositories II – Institutional

Advantages
— Linked to your institution
— All datasets are together, linking them with publications is easy
— Funding of the repository is secured

Examples
— BORIS for Publications (www.boris.unibe.ch)
— In process: BORIS Research Data
Types of Repositories III – Subject-specific

Advantages

— Data is stored with similar datasets (by subject, by format, or both)
— Other researchers of your field will find your data easily
— Repository will be tailored to your data’s needs (storage, archiving and preservation)

Examples:

— GenBank (Genome data)
— Pangaea (Earth & Environmental Science)
— ICPSR (numeric social science data)
The “right” repository is…

> … compliant with the FAIR data principles
> … in line with the funder’s requirements

…but where to find it?
How to find a suitable repository

> Ask your university library
> Ask your community of fellow researchers
> Check the data repositories list in the Open Access Directory http://oad.simmons.edu/oadwiki/Data_repositories
> Search re3data.org

Registry of Research Data Repositories; https://www.re3data.org/
Look for icons:

The research data repository provides...

The terms of use and licenses of...

The research data repository promotes...

The research data repository is dedicated to...

Contact your directory of interest to get more details.
Coffee & Bit(e)s
THE COFFEE LECTURES FOR SCIENTISTS

THANKS FOR YOUR ATTENTION

UNIVERSITY LIBRARY BERN

Open Science Support: researchdata@ub.unibe.ch
Philipp Casula & colleagues

Subject-specific information:
www.unibe.ch/ub/sciencelibrary
Aline Frank, Michael Horn & Silvan Christen
Additional Information
SNF Checklist

- Datasets are given persistent Identifiers (eg DOI)
- Upload of intrinsic (e.g. author's name, content of dataset, associated publication, etc.) and submitter-defined (e.g. definition of variable names, etc.) metadata is possible
- Submission form requesting intrinsic metadata in a specific format is provided (to ensure machine readability/interoperability)
- It is clear under which license the data will be available
- Citation information and metadata are always publicly accessible
- Repository has a long-term preservation plan for the archived data

SNF – Get Money for Data Archiving

Get up to CHF 10,000 for archiving research data (i.e., for upload, preparation and validation, but not for data storage during the project):

1) To which open research data costs does the SNSF contribute?

The SNSF is aware that it takes time and money to ensure adequate data management. Therefore it allows applicants to request funds for data upload (but not download), data preparation and validation (data stewardship). The SNSF may allocate up to CHF 10,000 for these activities.

http://www.snf.ch/en/theSNSF/research-policies/open_research_data/Pages/default.aspx#FAQ

http://www.snf.ch/en/funding/documents-downloads/Pages/regulations-general-implementation-regulations.aspx#ar_a_2_13
Generic Repositories: Storage Costs and Capacities

Zenodo
- Free upload (terms of use: content may be uploaded free of charge by those without ready access to an organized data centre.) → [http://about.zenodo.org/terms/](http://about.zenodo.org/terms/)
- 50GB/dataset ([http://about.zenodo.org/policies/](http://about.zenodo.org/policies/)) → contact staff for bigger datasets

Harvard Dataverse
- Free upload per user: max. 1 TB. In case of larger amounts of data, please contact the Harvard Dataverse team for cost information.
- Size limit per file: 2.5 GB

Dryad
- $120 for first 20GB, $50 for each additional 10 GB
- For details and waivers → [https://datadryad.org/pages/payment](https://datadryad.org/pages/payment)
BORIS Research Data

A data repository for the University of Bern

> **Target Group:** All researchers employed at the University of Bern
> **Purpose:** Infrastructure for the publishing of research data
> **Type:** Institutional repository, open for all disciplines
> **Software:** DSpace (open source)
> **Requirements:** Fulfill regulations by funders, faculties as well as the standards of the open science movement
> **Going live:** End of 2019