Keep calm and manage your data. Research data management education for scientists in Switzerland.

Author(s):
Sesartic, Ana; Barillari, Caterina; Dieudé, Aude; Krause, Jan; Lütcke, Henry

Publication Date:
2018-04-12

Permanent Link:
https://doi.org/10.3929/ethz-b-000258299

Rights / License:
Creative Commons Attribution 4.0 International
Keep calm and manage your data

Research data management education for scientists in Switzerland

EGU General Assembly 2018
«Data management is inevitably going to be an essential skill in the open-science era. [...] And yet, many scientists are scarcely familiar with what it is all about.»

doi: 10.1038/d41586-018-03071-1
Context: Data Life-Cycle Management (DLCM)

National initiative by swissuniversités

Trainings

Consulting Services

Policies & Guidelines

Technical Tools

National Portal

DMP

www.dlcms.ch
Swiss Higher Education Institutions call for **scientific integrity** in research

Various guidelines for research integrity require

- Project members to adhere to the **principles of good scientific practice**
- Primary data to be **documented and safe-guarded**
- Results to be **reproducible** based on available data and documentation

Project managers (i.e. professors, project leaders) are responsible for a functioning data management within the project
A data management plan (DMP) is required by…

- The Swiss National Science Foundation (SNSF)
  - Since October 2017
  - As part of their new policy on Open Research Data

- Horizon 2020 EU funding programme
  - For all thematic areas of Horizon 2020
  - Since the start of 2017
  - After an Open Research Data pilot phase 2014-16
Aim of a Data Management Plan according to SNSF

- **Planning the life cycle** of data
- Offer a **long-term perspective** by outlining how the data will be
  - Generated
  - Collected
  - Documented
  - Shared/Published
  - Preserved
- In the ideal case, you only need to **document** your current practice / **best practice** in your field
- **Making data FAIR**: Findable – Accessible – Interoperable – Re-usable
  - The **plan** should be **updated** as the project progresses
DLCM template for the SNSF Data Management Plan

- Main structure
  - Questions and guidelines from the SNSF
  - Recommendations from the library
  - Examples of answers taken from actual DMPs (anonymised)
  - Contact points for researchers at ETH Zurich and EPFL

- Available from
  - https://documentation.library.ethz.ch/display/DD/Guidance+for+ETH+researchers+on+filling+out+SNSF+Data+Management+Plans
Data management training formats

- **Lecture**
  - Usually 1.5 hours, general overview of data management and SNSF DMPs
  - Offered in English, German or French
  - 2 x per year plus further lectures upon request

- **Workshop**
  - Comprehensive training on data management
  - From half-day to whole-day
  - 2 x per year plus further workshops upon request
  - At ETH Zurich in collaboration with Scientific IT Services

- **Coffee lectures**
  - 15 min lecture, followed by discussion during coffee break

- **Webinar**
  - 30 min lecture + 30 min Q&A

- **Tailored trainings for groups**
  - Discipline specific
  - Available upon request

- **One-on-one consulting**
  - On data management in general
  - And DMPs in particular
Training topics

- Research Data Management in general
- Active Research Data Management
  - During one’s research
  - Tools and software (e.g. ELN/LIMS, versioning, collaboration)
- Data Management Plans
  - For funders
- Long-term preservation
- Regulations, privacy and security issues
- Licences, metadata and format standards
- Data publishing and Open Science issues
Some statistics on trainings
(as of end of March 2018)

- **EPFL**
  - 8 workshops in 2017
    - 68 participants
  - 12 workshops in 2018 (planned so far)
    - 4 given so far, 95 participants and counting
Some statistics on trainings
(as of end of March 2018)

- **ETH Zurich**
  - 8 workshops in 2017
    - 434 participants
  - 10 workshops in 2018 (planned so far)
    - 428 participants so far and counting
Benefits and limitations

- **Improved visibility** of library services
- **Libraries** reaffirmed their role as **centres of competence** regarding data management
- Institutional, national and international collaborations
  - ETH Zurich, EPFL, UNIGE, UZH, Inist-CNRS, Cambridge University
  - Within institutions themselves
    - Research Offices
    - Technology Transfer Offices
    - Scientific IT Services
    - Vice Presidencies for Research and Information Systems
    - Department Coordinators
- Difficult to determine the exact **number** of researchers **benefiting** from the services
- **Adoption of services** not same with all disciplines
- **Marketing challenge**: how to get noticed among the plethora of other services and news vying for a researchers attention
Outlook

- Continuous adaptation and further development of data management services
  - ETH Zurich: new training on Active Research Data Management
  - EPFL: specific trainings for selected labs
  - University of Zurich: in-house trainings for university staff
- More discipline-oriented services
- Nice-to-have: interactive version of the DMP template
- Swiss Research Data Day conference
  - 12 June 2018
  - https://www.dlcm.ch/swiss-research-data-day-2018
Thank you!