



Keep calm and manage your data

Research data management education for scientists in Switzerland

EGU General Assembly 2018



Adapted from Getty

CAREER FEATURE • 13 MARCH 2018

Data management made simple

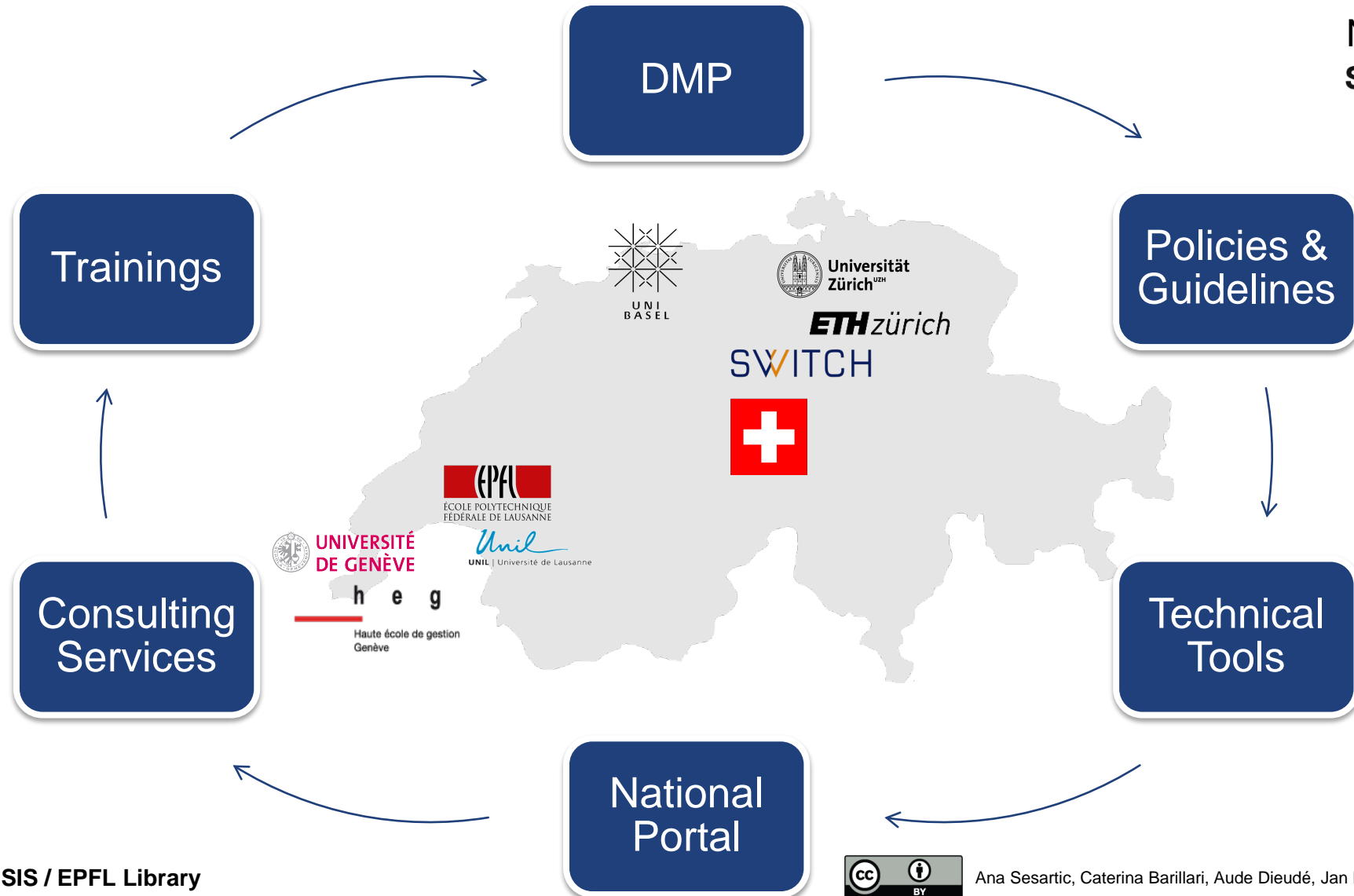
Keeping your research data freely available is crucial for open science – and your funding could depend on it.

«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.»

Schiermeier (2018) *Nature* **555**, 403-305
doi: [10.1038/d41586-018-03071-1](https://doi.org/10.1038/d41586-018-03071-1)

Context: Data Life-Cycle Management (DLCM)



National initiative by
swissuniversities

www.dlcm.ch

Data management at Higher Education Institutions

- 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

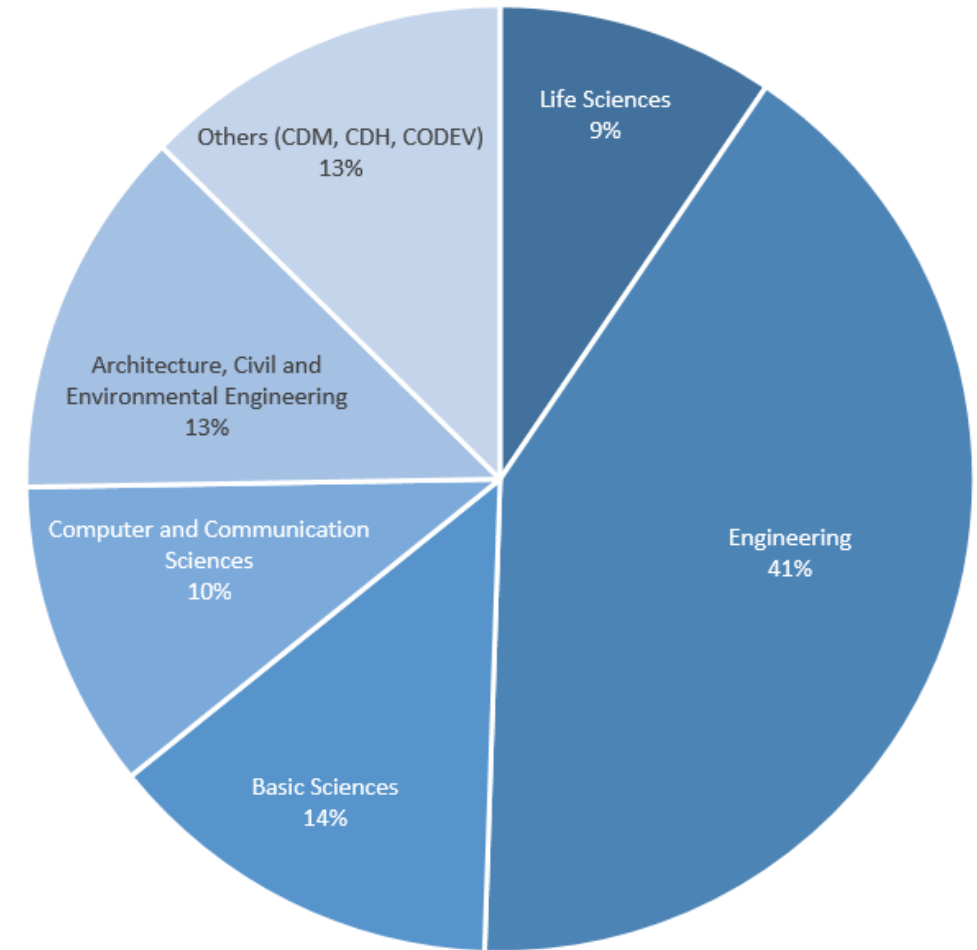
- Research Data Management in general
- Active Research Data Management
 - During one's research
 - Tools and software (e.g. ELN/LIMS, versioning, collaboration)
- Data Management Plans
 - For funders
- Long-term preservation
- Regulations, privacy and security issues
- Licences, metadata and format standards
- Data publishing and Open Science issues



www.digitalbevaring.dk

Some statistics on trainings (as of end of March 2018)

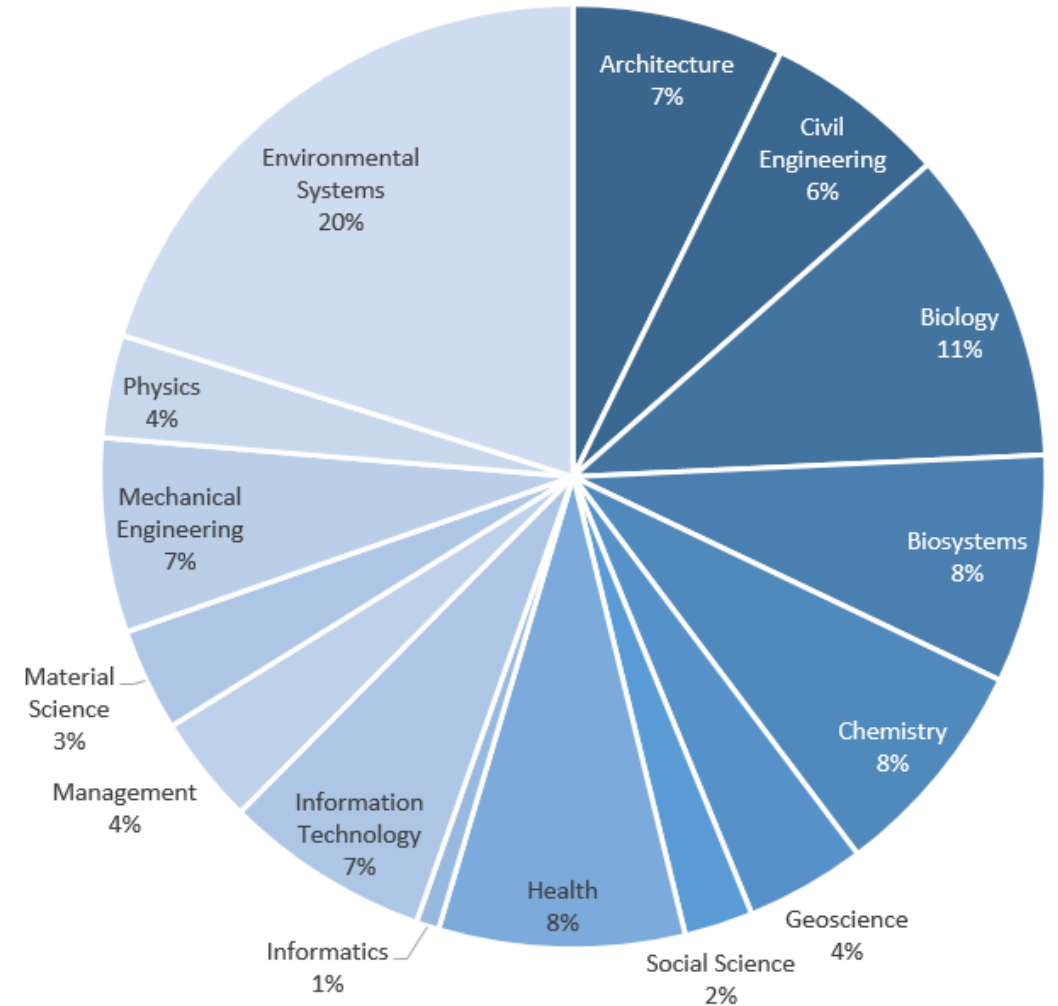
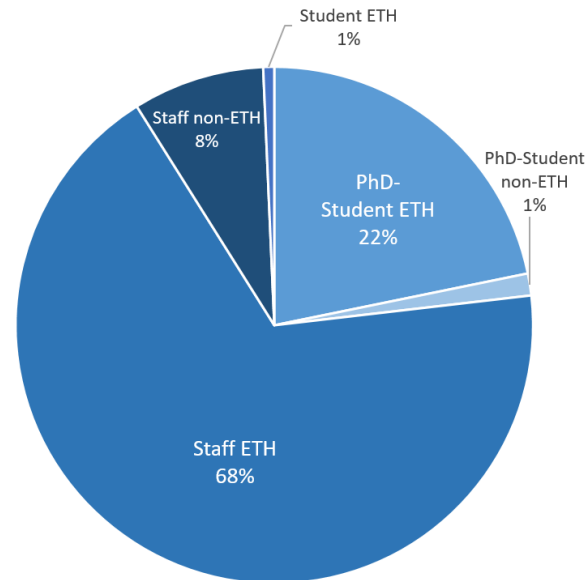
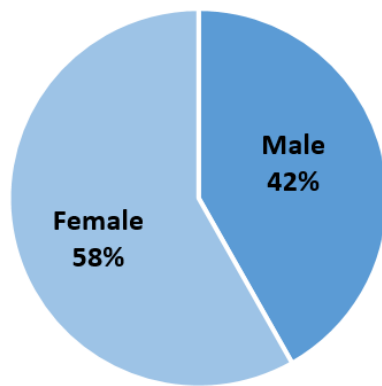
- **EPFL**
 - 8 workshops in 2017
 - 68 participants
 - 12 workshops in 2018 (planned so far)
 - 4 given so far, 95 participants and counting



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!

ETH Zurich

Research Data @ ETH

ethz.ch/researchdata
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EPFL Lausanne

EPFL Library

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