# **ETH** zürich

## Research Collection



#### **Presentation**

### DMP Support @ ETH Zurich - What do researchers need?

#### Author(s):

Ziehmer, Malin Michelle

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# **DMP Support @ ETH Zurich**

What do researchers need?

**Dr. Malin Ziehmer**, ETH Zurich, ETH Library, Research Data Management and Digital Curation **Data Management Planning and Teaching** 





# Who is providing the DMP support @ ETH Zurich?















Dr. Caterina Barillari

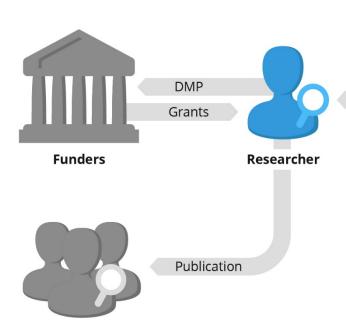
Dr. Henry Lütcke



# Research Data Management Services @ ETH Library

#### **Research Data Management & Digital Curation**

- Two sub-teams and one associated group
  - Data management planning and trainings
  - ETH Data Archive customer service and support
  - Library IT Services
- Two major topics
  - Research data management including **DMPs**
  - Digital curation / long-term preservation



**Peers** 



**Research Data Management & Digital Curation** 



#### **Information material**

- Checklists
- Examples
- Online-Documentation



#### Consulting

- Data management
- Data Management Plan (DMP) writing assistance
- Best practices



#### **Training**

- Data management
- DMP
- Publishing data
- · Preserving data



### **Process Overview and Outline**

### **DMP Support @ ETH Zurich**

#### Outreach

via website, social media and print advertisement

#### **Transfer**

of knowledge
via info events or trainings
(basic knowledge on DMPs)

### Consulting

before and during preparation of DMPs via email, phone or in person

**DMP** review

**Aim:** inform researchers on our DMP services and events

**Aim:** communicate basic knowledge and funding regulations to researchers **Aim:** consulting for researchers when they actively start preparing their DMP



# Who is providing the services on DMPs at ETH Zurich?

**ETH Library** Innovation, Marketing and Communities (IMC) Research Data Management and Digital Curation @ ETH Library and

Scientific IT Services (ID-SIS) @ ETH IT Services

#### Outreach

via website, social media and print advertisement

### **Transfer**

of knowledge via info events or trainings (basic knowledge on DMPs)

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before and during preparation of DMPs via email, phone or in person

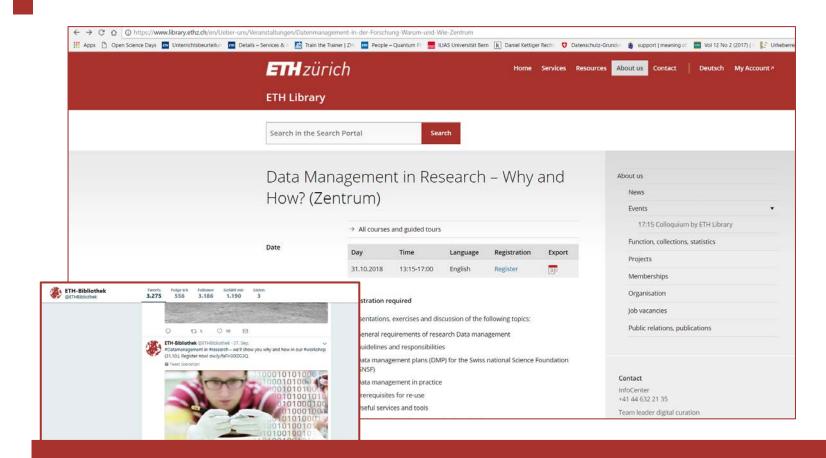
**DMP** review

Aim: inform researchers on our DMP services and events

Aim: communicate basic knowledge and funding regulations to researchers

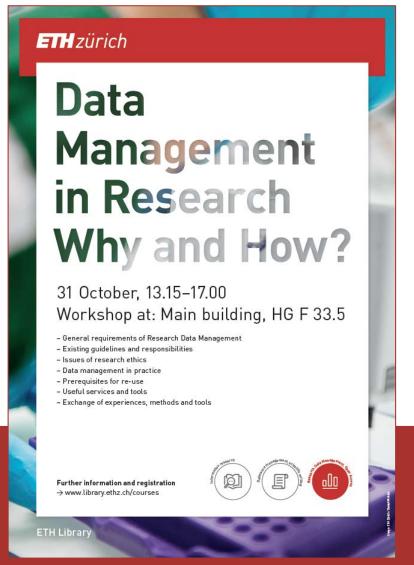
**Aim:** consulting for researchers when they actively start preparing their DMP





# Outreach - Spreading the information

via website, social media and print advertisement





# Outreach to researchers and early career scientists

### ... is not as easy as it sounds!

- Researchers at ETH Zurich are often not aware of services provided, e.g. by the ETH Library or the Scientific IT Services
  - Research data management consulting and training
  - DMP consulting and review
  - Consulting on ELN and LIMS
  - Code and data clinic
  - And many, many more...
- There are often more pressing issues than research data management
- Many other interesting events plus obligations

... and sometimes, the **view beyond the horizon** is missing (focus only on own department/ institute/ professorship) – **never change a running system...** 





## How do we reach out to researchers at ETH?

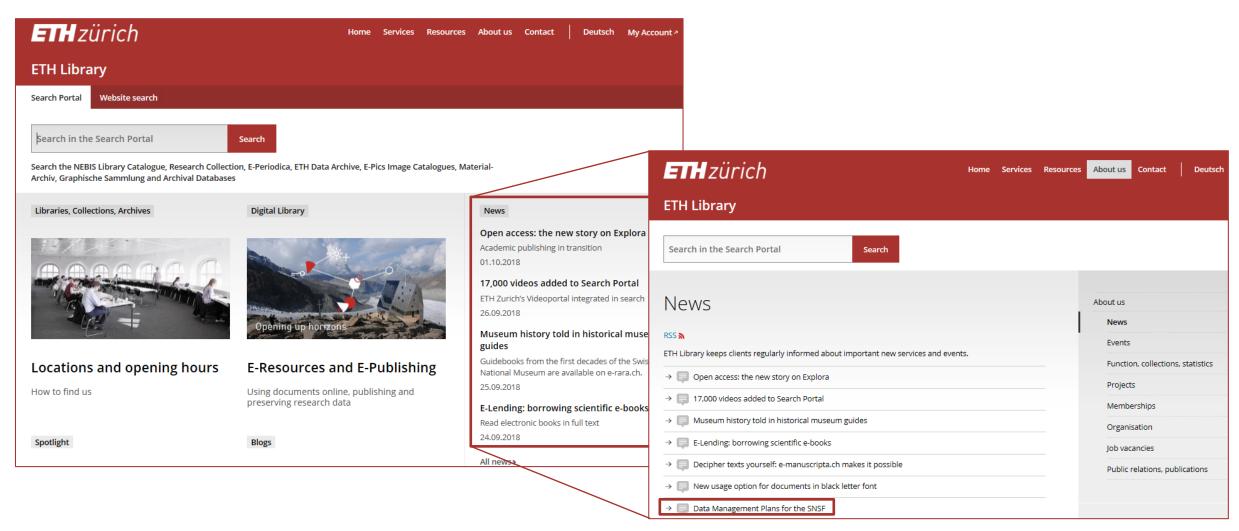
- Important first step to make researchers aware of our services
- Managed by the ETH Library-internal marketing and communication group (IMC, Innovation, Marketing and Communities)
- Outreach to researchers via
  - Our website <a href="https://www.library.ethz.ch/en/">https://www.library.ethz.ch/en/</a>
  - Social media
  - Paper-printed ads on posters and flyers
- Raising awareness of information events and trainings on DMPs by
  - Information videos
  - News items
  - → especially before deadlines of funders!





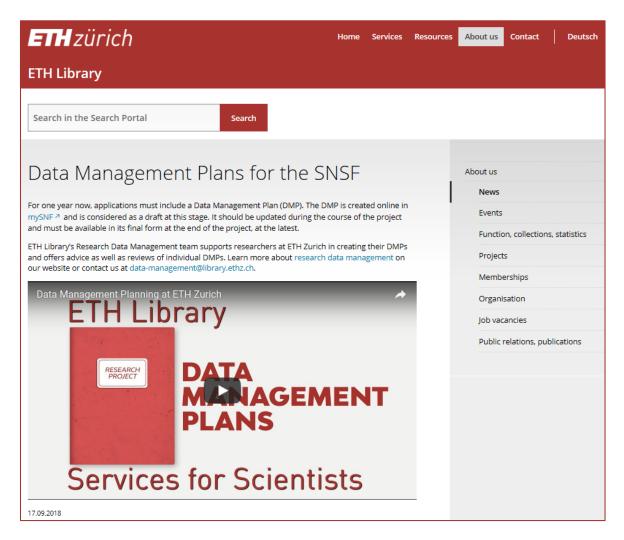


# Outreach I: News items and videos on the ETH Library website





# Outreach I: News items and videos on the ETH Library website

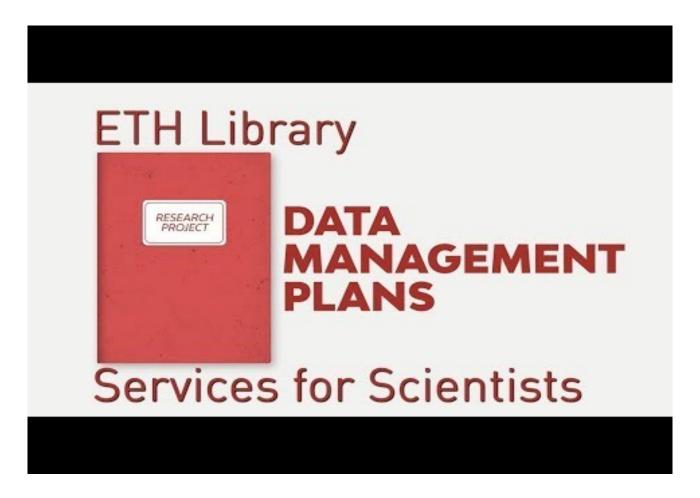


- **News item** as a reminder for researchers:
  - The semi-annual deadline for applications for project **funding** from the Swiss National Science Foundation (SNSF) is approaching (1 October 2018)
  - ETH Library's RDM team supports researchers at ETH Zurich in creating their DMPs and offers advice as well as reviews of individual DMPs
- *Plus:* publication of a DMP Video presenting our services
  - Part of the **#Library Service for Scientists** campaign by the IMC group at ETH Library



# Outreach I: News items and videos on the ETH Library website

# **#Library Service for Scientists (regular animation videos)**



https://www.youtube.com/ watch?v=mYNqExSJaMw

17.09.2018 Published:

Views: 86

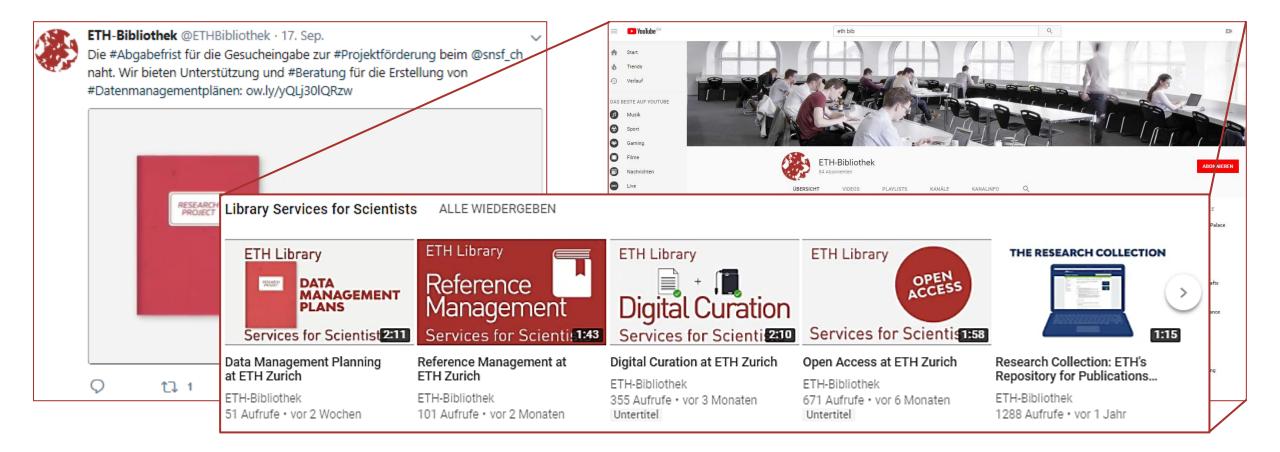
(24.10.2018)

(93 views on Facebook, 114 views on Twitter)

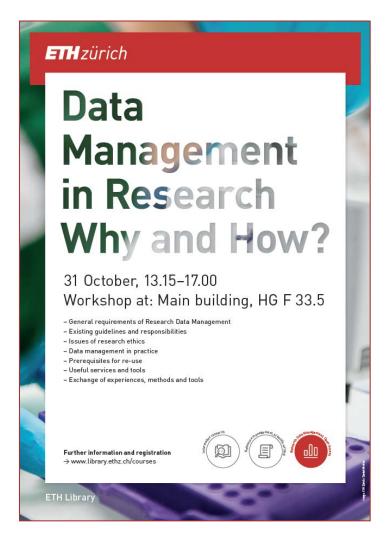


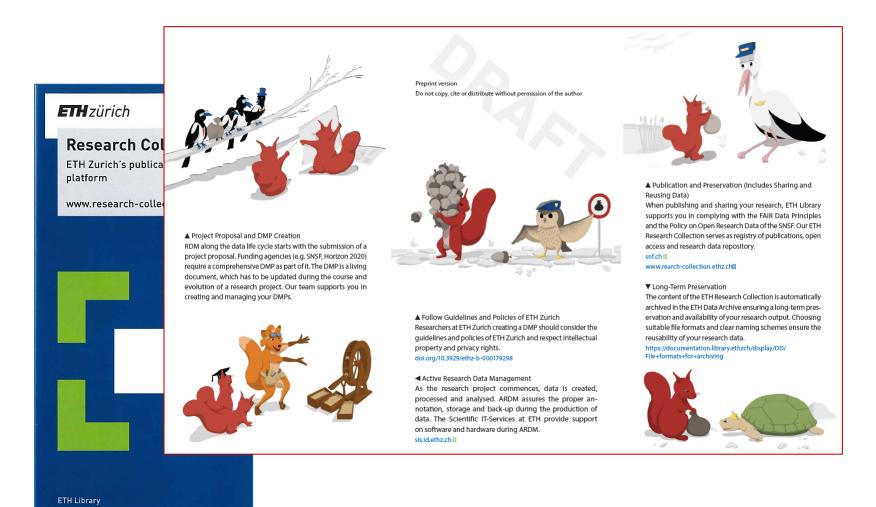
### Outreach II: Social media





### **Outreach III: Print advertisement**

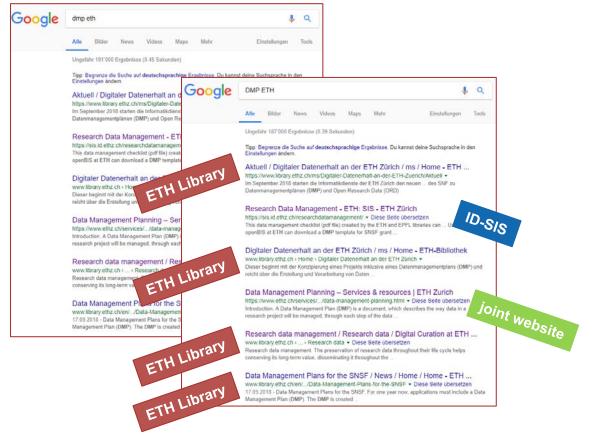




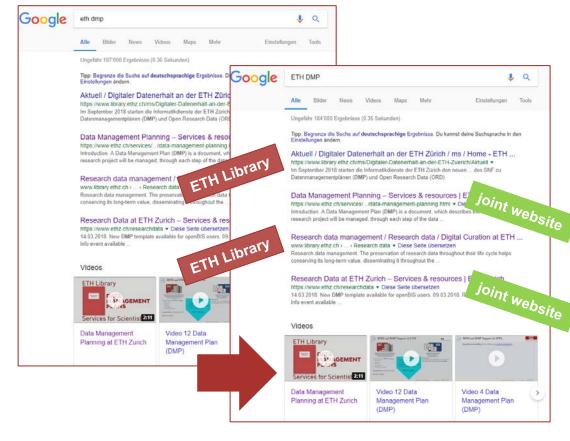


## ... and what if scientists google ETH and DMP or vice versa?

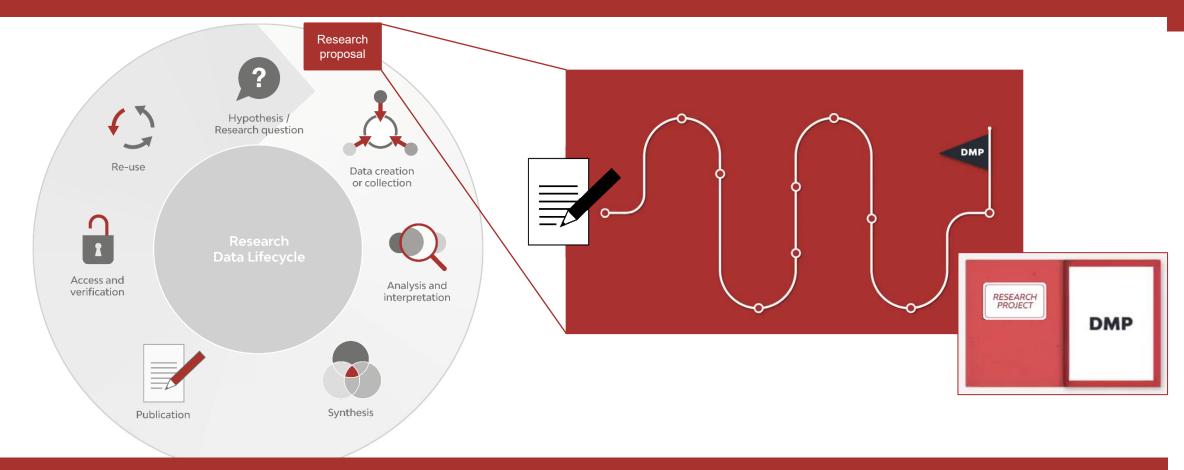
### «dmp eth»/«DMP ETH»



#### «eth dmp»/«ETH DMP»







# Communication via info events and trainings

Imparting knowledge on DMPs and funding regulations to scientists

# Info events vs. trainings



### Info events

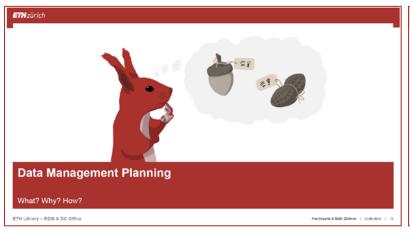
- Short (approx. 1 hour) events in **lecture form**
- Plus **Q&A**
- Presentation of **latest news** and regulations from funding agencies in a compressed form
  - How do they influence researchers in their work
- Mostly covers **novelties** of the Swiss National Science Foundation (SNSF)

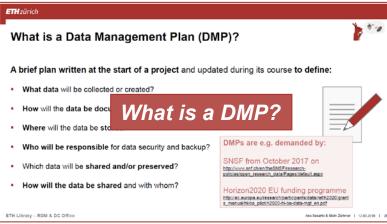
### **Trainings**

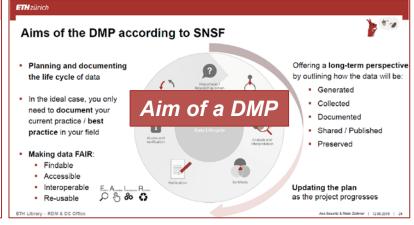
- Various forms
  - Workshops
  - Seminars
  - Webinars
  - Customised trainings for individual research groups or the like
- Up to **half a day** or a **day**
- **One-on-one** consulting
- Covers research data management along the entire research data life cycle
- Also includes **funding regulations** and data management planning (**DMP**), embedded in the bigger picture of the research data life cycle



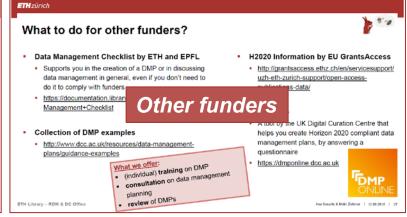
# Content of trainings – Focus on DMPs























# Consulting

before and during the preparation of DMPs via email, phone or in person

### **Guidelines and Checklists**

→ Data Management Checklist for ETH researchers

https://documentation.library.ethz.ch/display/DD/Data+Management+Checklist

#### PDF.

https://documentation.library.ethz.ch/display/DD/Data+Management+Checklist ?preview=/6685501/20086785/DMP-Checklist.pdf

Checklist is based on a generalised research data lifecycle, and is flexible enough to be applied to requirements from different funding organisations



#### **Data Management Checklist**

long-term value and prevents data from falling into digital scientific practice and ensures the reproducibility of research obsolescence. Proper data management is a key prere-results, a key requirement at the core of the research quisite for effective data sharing throughout the scientific process. community. This, in turn, increases the visibility of scholarly work and is likely to increase citation rates.

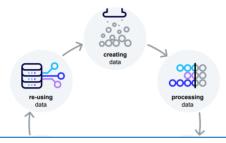
management plans and insist on open access publication organisations. of the research results they funded.

Even if a funding body does not explicitly demand data management, following professional curation and preservation concepts has numerous advantages:

- · It greatly facilitates the reuse of research data.
- As a result, this increases the impact of research results.
- · It saves precious research funds and ultimately natural and human resources by avoiding unnecessary duplication of work.

Managing research data throughout its lifecycle ensures its Today, the availability of well-managed data is part of good

The following data management checklist is based on a generalised research data lifecycle, and is flexible Many funding organizations prescribe the use of data enough to be applied to requirements from different funding



### **Guidelines and Checklists**

→ **Guidance for ETH researchers** on filling out SNSF DMPs

https://documentation.library.ethz.ch/display/DD/Guidance+for+ETH+resear chers+on+filling+out+SNSF+Data+Management+Plans

PDF:

https://documentation.library.ethz.ch/download/attachments/13762611/DLC M SNSF-DMP v2.pdf

Includes explanations per question, examples from DMPs, contacts and links specific for ETH Zurich



#### **DLCM** template for the **SNSF Data Management Plan**

prepared by





#### Please note

Recommendations in this d trate the guidelines and oth SNSF for preparing Data Ma guidelines are binding.

This document was prepare braries of EPFL and ETH 2 partners, and exists in adapte ties. It can also be freely adap The examples therefore do r examples from other subject welcome to info@dlcm.cl revisions

1. Data collection and documentation

1.1 What data will you collect, observe, generate or re-use?

Questions you might want to consider

· What type, format and volume of data will you collect. observe, generate or reuse?

Which existing data (yours or third-party) will you reuse?

Briefly describe the data you will collect, observe or generate. Also mention any existing data that will be (re)used. The descriptions should include the type, format and content of each dataset. Furthermore, provide an estimation of the volume of the generated datasets.

This relates to the FAIR Data Principles F2, I3, R1 & R1.2 tion SNSE logo.pdf

#### Recommendations

For each dataset in your project (including data you might

- · Data type: Briefly describe categories of datasets you plan to generate or use, and their role in the project.
- · Data origin: to be mentioned if you are reusing existing data (yours or third-party one). Add the reference of the
- . Format of raw data (as created by the device used, by simulation or downloaded); open standard formats should be preferred, as they maximize reproducibility and reuse by others and in the future [see List of recommended file formats\*1
- Format of curated data (if applicable): open standard formats should be preferred [see List of recommended
- · Estimation of volume of raw and curated data

\*List of recommended file formats, for ETH Zurich

#### Examples of answers

to be adapted to your research application

The data produced from this research project will fall into

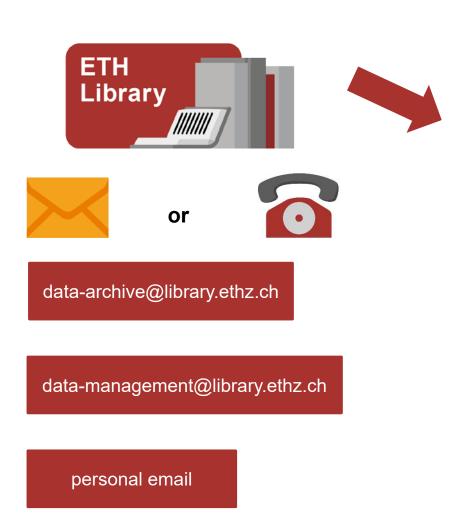
- The various reaction parameters required for optimiza tion of the chemical transformation.
- 2. The spectroscopic and general characterization data of all compounds produced during the work.

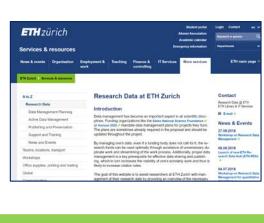
Please contact data-archive@library.ethz.ch for feedback





# Consulting before and while writing a DMP











or



www.ethz.ch/researchdata

researchdata@ethz.ch



### **Short excursion:**

# Sharing consulting tasks between library and IT services



Research Data Management and Digital Curation (ETH Library) www.librarv.ethz.ch/RDM data-management@library.ethz.ch









Scientific IT Services https://sis.id.ethz.ch/ sis.helpdesk@ethz.ch

#### Various forms of **RDM training**

- Info events
- Lectures
- Seminars
- Workshops
- Individual trainings

Consultation on RDM and DMP

**Review** of DMPs

#### Research Data www.ethz.ch/researchdata researchdata@ethz.ch

#### Consulting

- Advice on research data workflows
- Advice on and review of DMPs for Grant applications

**RDM Training** 

#### since 2018:

Mandate to provide ARDM services to all ETH

Data Management Service based on openBIS

- Basic offer
  - Install and maintain openBIS on ID infrastructure
  - Initial openBIS training
  - User support
- additional services on demand
  - Database customization
  - Migration of existing databases
  - Instrument integration for direct data upload

## **Short excursion:**

# Sharing consulting tasks between library and IT services

Data Management Planning (DMP)

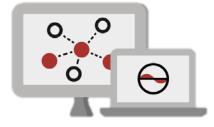
**Active Research** Data Management (ARDM)

Publication and Preservation of Research Data

### **Consulting & Training**

- ETH website
- DM plans
- DM guidance
- RDM workshops on concepts and available services











http://www.ethz.ch/researchdata

Library

**IT Services** 

- Training
- Consulting

#### **IT Services**

- Software
- Hardware
- Services

#### Library

- Publications services
- Preservation services





# **DMP** review



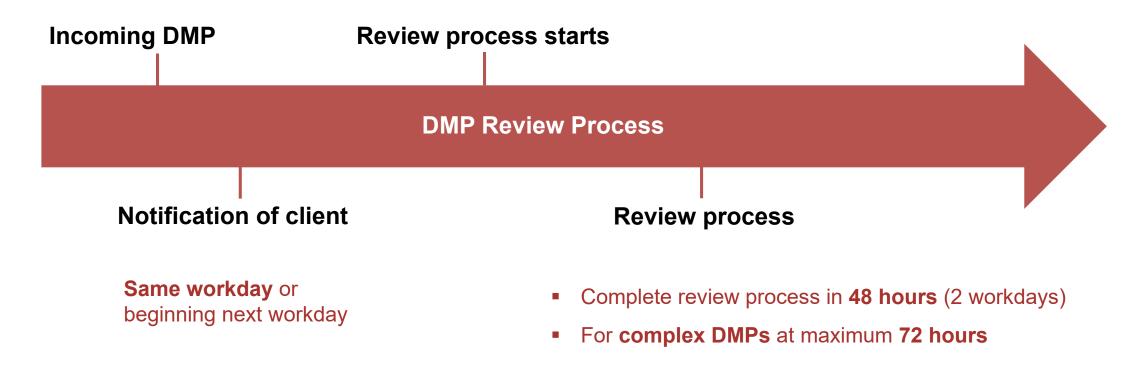
# Why do we offer a DMP review?

- Large insecurity and a lot of open questions among the research community after the implementation of the Open Research Data Policy by the SNSF
  - What are the exact requirements?
  - How can I meet the novel requirements?
  - Fear of project proposal rejection due to an insufficient DMP with consequences for their research
- General strive of researchers to apply **good scientific practice**
- **Thankful for help** from someone who knows the requirements by heart
- **Consultings** at Swiss universities partly **differ** 
  - → researchers from the same research community might receive varying advice
- A proper consultation and DMP review saves the additional amount of work of correcting a DMP





# General information on review process



- **Emergency service** on weekends before the most important deadlines

**Regular monitoring** of national and EU-funders deadlines



# Who are the experts and what do we review?

#### Who?

- Core team:
  - Experimental scientist
  - Modeller
  - Scientific IT specialists
  - → all former researchers
- RDM team at ETH Library
  - Familiar with funders' and ETH's regulations
- Scientific IT Services
  - ELN-LIMS, versioning, storage
  - Active research data management, especially in life and natural sciences

#### In addition:

- Close contact with the **e-publishing team** 
  - Experts on the ETH Zurich Research Collection (repository for publications and research data)



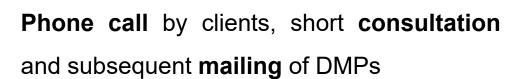
#### What?

- DMPs are reviewed for their
  - **Plausibility**
  - Completeness
  - Comprehensibility
  - Fulfillment of regulations
  - Grammar and spelling



### How do we receive DMPs?





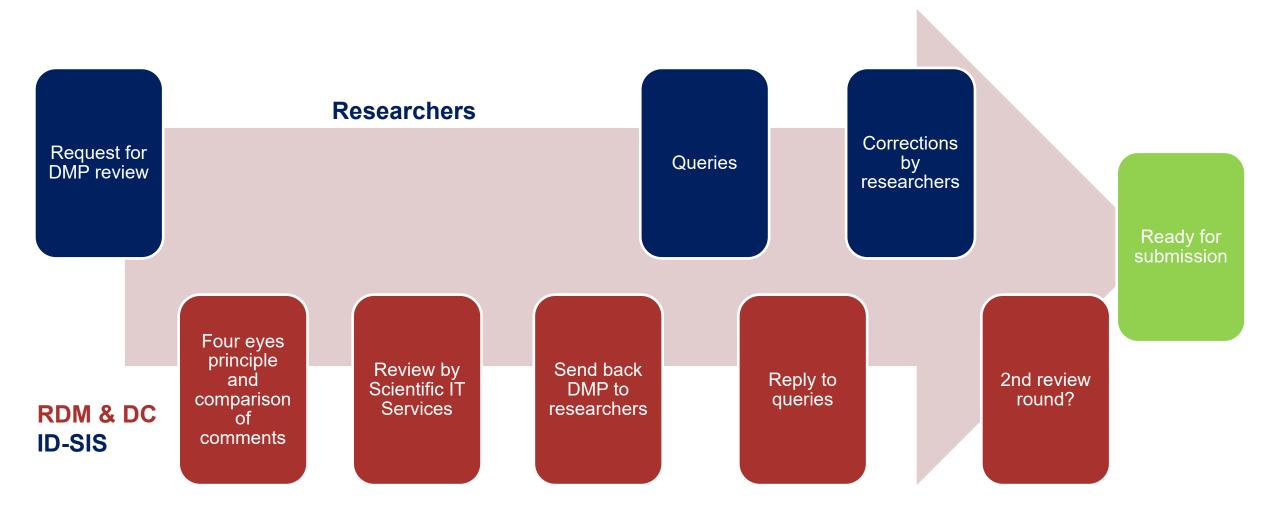


### Directly via email to

- Personal email accounts (ETH Library, ID-SIS)
- data-archive@library.ethz.ch
- data-management@library.ethz.ch
- researchdata@ethz.ch



## **Overview on Review Process**





# Four-eyes principle for DMP review

Reviewer 1

Reviewer 2

Reviewer 3 **ID-SIS** 

Experts

Final draft send to researcher

... iteratively reads DMP and focuses on various review criteria.

> iteratively reads DMP, focuses on various review criteria. and critically assesses comments the Reviewer 1.

An expert from the Scientific IT Services reviews for IT issues.

For any questions regarding repositories and long-term preservation, experts at ETH Library are contacted

General rule of thumb:

In case of doubt, a third reviewer is consulted.

1 + x reviewers plus expert advice on special issues



### Review criteria for DMP evaluation

#### **Iterative Review Process**

### Step 1

- Check for comprehensibility
  - Can I follow the **structure?**
  - Are there any **open points**?
  - Is any **contextual information** missing?
  - Is it plausible?

### Step 2

- Are the **individual questions** in the DMP properly answered?
- Is there any confusion in storage, **long-term preservation** of data or data sharing?
- Is there anything that could be improved during the course of the project?

### Step 3

- General formal issues
  - File formats
  - Grammar and spelling
  - Naming of measurement devices
  - Correct naming of repositories
  - Etc.



# **Summary**

### **DMP Support @ ETH Zurich**

### Outreach

via website, social media and print advertisement

### Transfer

of knowledge via info events or trainings (basic knowledge on DMPs)

### Consulting

before and during preparation of DMPs via email, phone or in person

**DMP** review

... and those that find us, our services and support, are thankful!





### Personal contact information

#### Dr. Malin Michelle Ziehmer

ETH Zurich, ETH Library Research Data Management and Digital Curation Rämistrasse 101 CH-8092 Zurich

+41 44 633 86 32

http://www.library.ethz.ch/RDM data-management@library.ethz.ch

https://www.library.ethz.ch/en