



Coffee Lectures

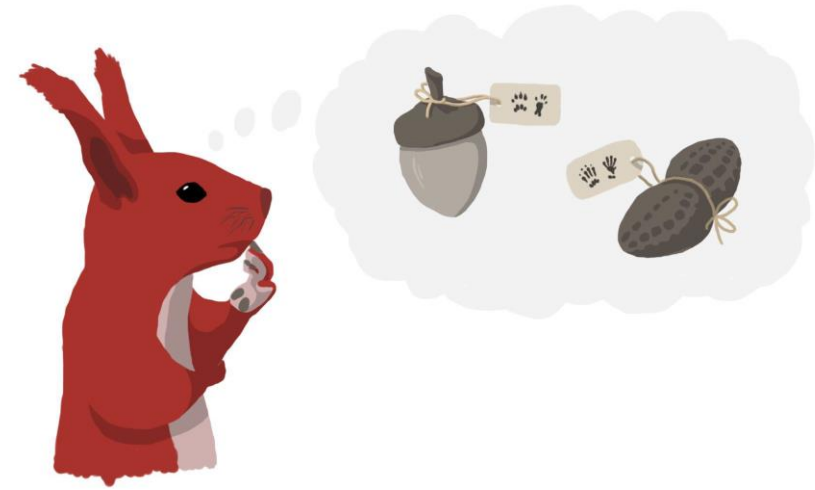
## The Research Data Lifecycle

How to handle data during all steps of your project

Dr. Julian Dederke

4 November 2020, (Webinar via Zoom)

# Learning Goals



- You understand which steps the Data Lifecycle (DLC) contains and which tasks they entail for your project.
- You know which services are available at ETH and where to turn for support during key steps of the DLC.

# The Research Data Lifecycle (DLC)

- **Reuse** relates to
  - primary data
  - processed data
  - analysis scripts / code
- **Open or restricted access**
- **Sensitivity / confidentiality**
- **Publication of**
  - manuscripts/books/papers
  - data and documentation
  - analysis scripts / code
- **Open Access** options



- Decisions what to keep and what to discard
- Formulation of results and conclusions

- **Long-term view** on the lifecycle of your research data
- **Data Management Plan**
  - part of projects/applications
  - planning of DLC steps
- **Data PLUS Metadata**
  - **metadata:** “Data about your data”
  - administrative, descriptive, structural, technical metadata
- **Analysis steps, code creation, versioning, traceability of changes**

# Tasks along the Research Data Lifecycle (DLC)

- **Assure reusability:**
  - choose a suitable repository (FAIR, non-commercial) and archive
  - assure findability with persistent identifiers (e.g., DOI)
  - increase visibility
- **Ensure security, openness, access rights**
- **Choose appropriate outlets for**
  - manuscripts/books/papers
  - data and scripts



- **Aggregate data; preparation for publication**

- **Long-term view** on the life-cycle of your research data
- **Data Management Planning:**
  1. at the start of the project
  2. continuous development and update
- Define which data you **collect where, when, and how**
  - daily data management
- Analysis steps and tools:
  - choose appropriate **tools**
  - **process** data
  - **save and control versions** of scripts, code & processed data

# Services and Support along the DLC

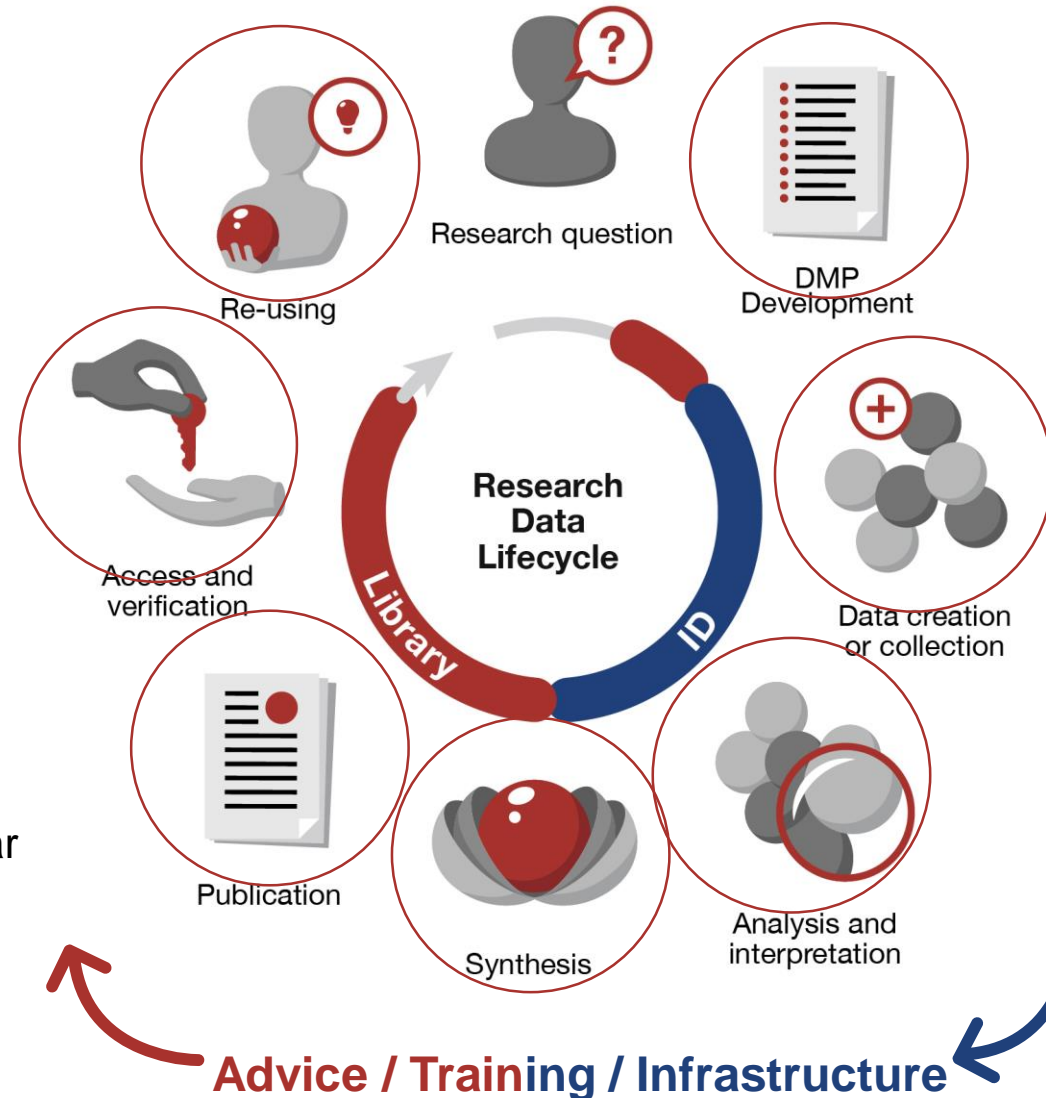
- Preservation and Archiving Services

- ETH University Archives
- ETH Web Archives
- Preservation planning
- Metadata preparation

- ETH Research Collection

- Publication services

- Open access publishing
- DOI registration
- Indexing in Google Scholar



- Reference management software: licences and courses

- DMP guidance, templates, and review:

- <http://www.snf.ch>  
→ DMP Guidelines
- <https://documentation.library.ethz.ch/x/MwDS>

- Support on handling sensitive and confidential data
- Active data management services (e.g., openBIS)
- IT infrastructure, high-performance computing
- Soft- and hardware support

<https://library.ethz.ch>

**ETH** zürich

ETH Library

**Advice / Training / Infrastructure**

<https://sis.id.ethz.ch/>

Dr. Julian Dederke | 04.11.2020

5

# Thank you & happy to help

## Contact & Support









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ETH Library and  
Scientific IT Services  
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## Services at ETH Library

Scientific information		Research		Publication and preservation	
<b>Publications</b>  <ul style="list-style-type: none"><li>• (E-) Journals</li><li>• (E-) Books</li><li>• Handbooks</li></ul>	<b>Data</b>  <ul style="list-style-type: none"><li>• Data Bases</li><li>• Object collections</li><li>• Archives</li></ul>	<b>Information retrieval</b>  <ul style="list-style-type: none"><li>• Online Access / Loan</li><li>• Media/Data purchase on demand</li></ul>	<b>Consulting and training</b>  <ul style="list-style-type: none"><li>• Research data management / plans</li><li>• Copyright</li><li>• Reference Management</li></ul>	<b>Publication services</b>  <ul style="list-style-type: none"><li>• Open Access publishing</li><li>• DOI registration</li><li>• Indexing in Google Scholar</li></ul>	<b>Research Collection</b>  <ul style="list-style-type: none"><li>• Publication platform</li><li>• Open Access</li><li>• Research Data</li></ul>
		<b>Preservation services</b>  <ul style="list-style-type: none"><li>• Metadata preparation</li><li>• Preservation planning</li></ul>	<b>Archiving services</b>  <ul style="list-style-type: none"><li>• ETH University Archives</li><li>• ETH Web Archives</li></ul>		

## Training Events

- **Research Data Management Workshop Series I - VI**,  
Every Wednesday from 28 October to 2 December 2020  
Joint venture between: Scientific IT Services and ETH Library
- **Research Data Management Summer School**, 14-18 June 2021  
Joint venture between: Scientific IT Services, Legal Services and ETH Library
- **Individual workshops/support** for research groups



# Thank you for your attention!

Next Coffee Lecture:

Get a literature overview to your research question with  
Open Knowledge Maps

11 November 2020, (Webinar via Zoom)

[www.library.ethz.ch/coffee-lectures](http://www.library.ethz.ch/coffee-lectures)