

MEDICAL RESEARCH DATA ORGANIZATION

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WPI



UniversitätsSpital
Zürich

Overview



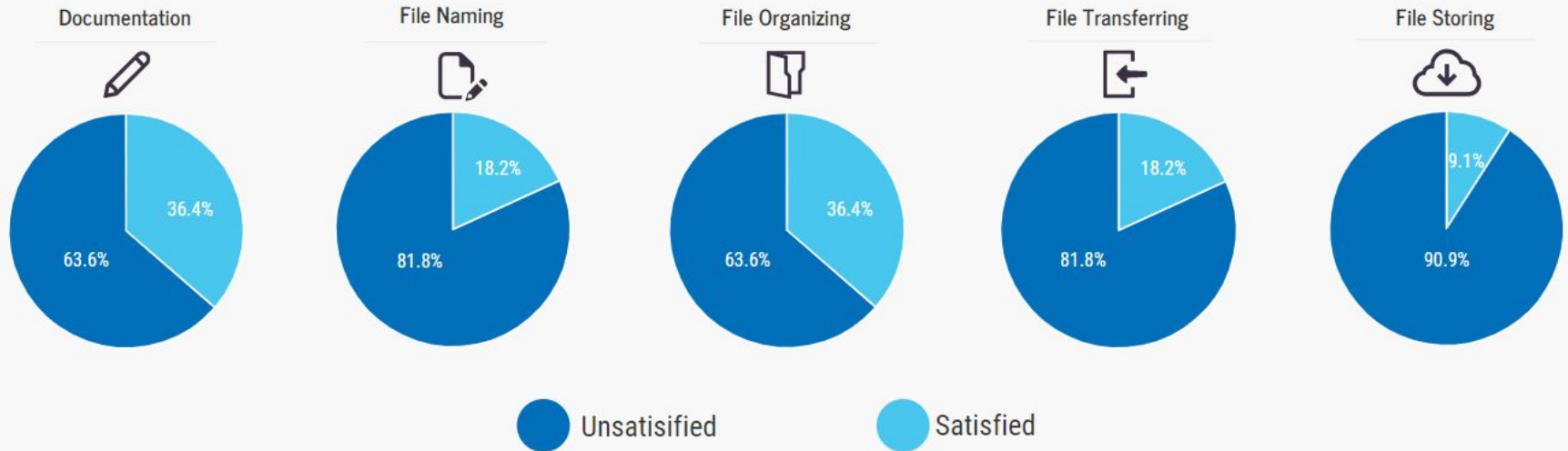
Improving Data Management at USZ

1: Evaluate data management procedures

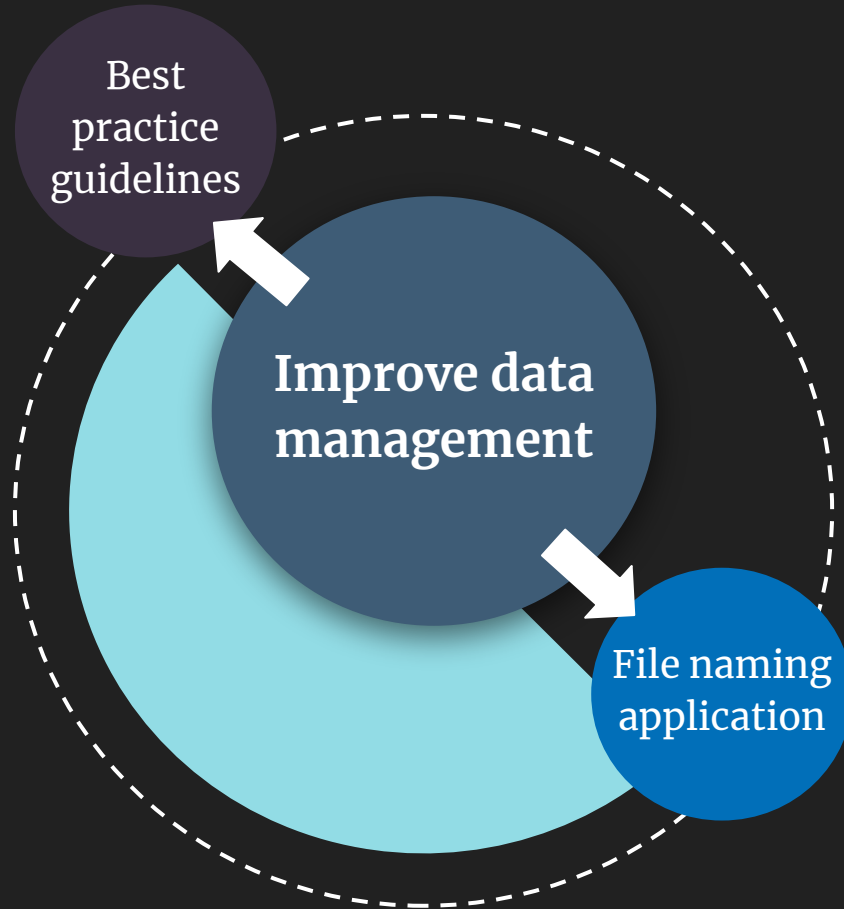
2: Identify key issues impeding efficient data management

3: Develop tools for improving data management

Satisfaction with Current Data Management



Proposed Solutions



Best Practice Guidelines

Chapter 2: Documenting Data

In this section, best practices for documentation in both electronic and paper lab notebooks are discussed.

Documentation, as it relates to research data, refers to information that aids in the interpreting and understanding of data. The act of documenting data entails specifying what, when, how, and where an experiment was conducted. Comprehensive documentation not only enables others to understand the work that was conducted but also serves as clear reminders to the person who conducted the work if the data should need revisiting.

Paper Lab Notebooks

The following are good rules of thumb for documenting information in paper lab notebooks, and an example of these practices can be found on the next page:

- **Create and update a table of contents.** This allows you to quickly find experiments in lab notebooks that have many entries.
- **Date every page.**
- **Write clearly and neatly.** Legible handwriting benefits yourself and others when trying to read and understand the information later.
- **Record the name and aims of each experiment or project.** This information is ideally located at the top of each page and allows you to remember what the goal of the experiment or project was at a later time.
- **Record the procedure in detail.** Doing allows experiments to be easily reproducible. Be specific when describing details such as techniques, amounts, machines used, and materials.
- **Record experimental conditions in detail.** Similarly to recording the procedure, this is important because it makes experiments easily reproducible. Conditions can include temperature, brand and lot numbers of chemicals, the duration of the experiment, instrument calibration numbers, etc.

Table of Contents

Chapter 1: Introduction	.....
Purpose of this Handbook	.....
Chapter 2: Documenting Data	.....
Paper Lab Notebooks	.....
Electronic Note-Taking	.....
Audio Note-Taking	.....
Code	.....
Applications to SNSF Requirements	.....
Conclusions	.....
Chapter 3: Naming Data Files	.....
Necessary Components	.....
Examples of File Names	.....
Common Mistakes	.....
Applications to SNSF Requirements	.....
Conclusions	.....
Chapter 4: Organizing Data File Folders	.....
Characteristics of Good Organization	.....
Methods	.....
Applications to SNSF Requirements	.....
Conclusions	.....
Chapter 5: Storing and Transferring Data Files	.....
Handwritten Data	.....
Electronic Data	.....
Applications to SNSF Requirements	.....
Conclusions	.....
Additional References	.....
Paper Lab Notebook Checklist	.....
Electronic Note-Taking Checklist	.....
Audio Note-Taking Checklist	.....
Naming Files Checklist	.....
Organizing Data Files Checklist	.....
Storing and Transferring Physical Data Checklist	.....

Research Data Management Handbook



Written in collaboration with Worcester Polytechnic Institute





Checklists

Paper Lab Notebook Checklist

Have you...	✓, X, or N/A
... started on a new page?	
... made an associated table of contents entry?	
... dated the page?	
... recorded the name of the experiment or project?	
... recorded the aim or purpose of the experiment or project?	
... recorded the procedure in detail?	
... recorded experimental conditions in detail?	
... recorded observations and results in detail?	
... explained and expanded any abbreviations?	
... explained any mistakes or failed results?	
... attached any external graphs or computer printouts?	

File Naming Application

File Help **Full Namer** ☐ Compact Namer Project: Example Project

☒ **Date**  

☒ **Experiment**

☒ **Researcher**

Trial Number

☒

Sample Number


☒

Additional Keywords Table

Name	Data Value
Time in hours	3
Frequency	40

Filename Preview:

Full ☒ **Compact Namer**

Date 

☒ **Trial #**

☒ **Samp. #**

Logger

Current Log History

Time	Date	Researcher	Trial #	Sample #	Filename	Comment
17:06:2...	04 10 18	John Doe	0	0	2018_10_4...	This is an example comment.
17:06:2...	04 10 18	John Doe	1	0	2018_10_4...	This is an example comment.
17:06:2...	04 10 18	John Doe	2	0	2018_10_4...	This is an example comment.
17:06:2...	04 10 18	John Doe	3	0	2018_10_4...	This is an example comment.
17:06:31...	04 10 18	John Doe	3	1	2018_10_4...	This is an example comment.
17:06:3...	04 10 18	John Doe	3	2	2018_10_4...	This is an example comment.
17:06:3...	04 10 18	John Doe	3	3	2018_10_4...	This is an example comment.

CREATE A NEW LOG FILE

Log File Name:

Submit

Close

Load Log

Write History To Log File

Reset Logger

Close

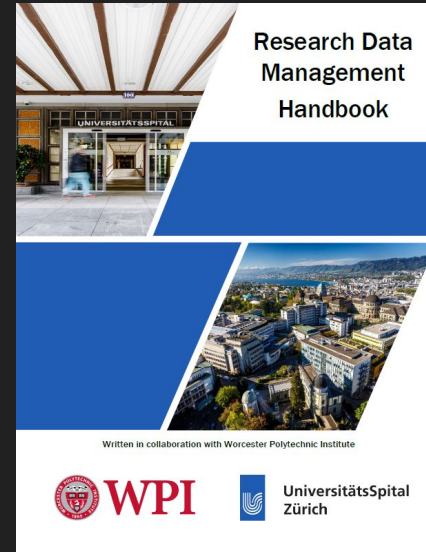
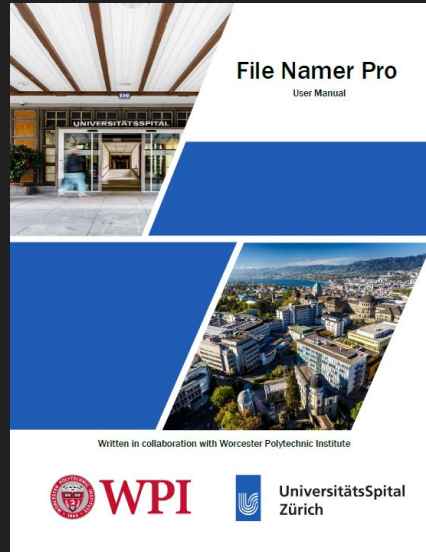
Summary of Deliverables

Full ☒ Compact Namer

Date

☒ Trial #

☒ Samp. #



Paper Lab Notebook Checklist

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Paper Lab Notebook Checklist - 16

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