

Implementation of Data Management Plans and Data Stewardship in practice

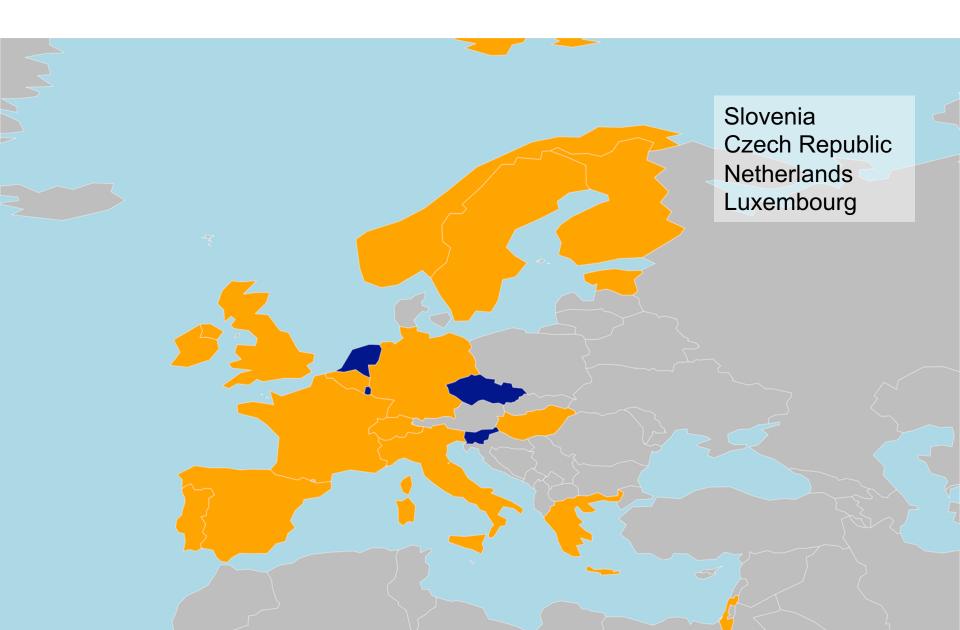
Roland Krause ELIXIR-LU





ECCB 2018

Workshop organization



Dr Bruce Banner aka The Incredible Hulk

Unrealistic depiction of a scientist

- ... can throw cars around and resist gun shots
- Dr Bruce Banner has 7 PhDs
- Stores all research results in databases







Your data management



crucProj_final.xl SX



crucProj_v2.xlsx



crucProj_3_3_20 14.xlsx



crucProj_RK.xlsx



crucProj_3_3_20 crucProj_v1.xlsx 14_v4.xlsx





crucProj_Nature. xlsx

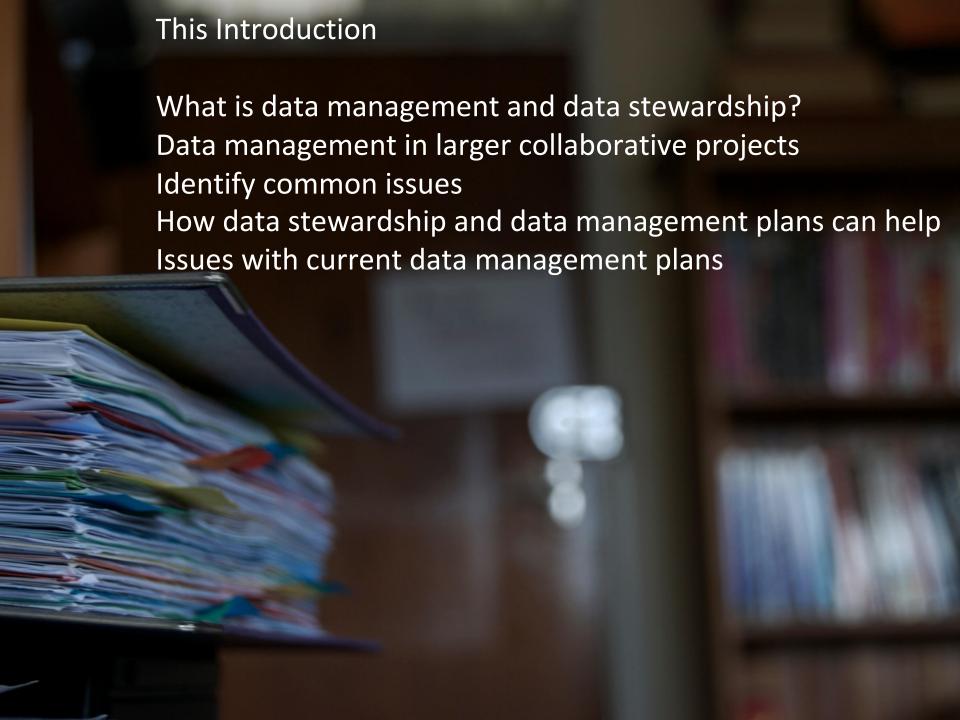


crucProj_Epileps yEes.xlsx



crucProj_Epileps yRes.xlsx





Data stewardship vs data management

Management

Local, manipulating data

Data flow within the project

Examples

File naming conventions
Collecting metadata
Back-up

How to name files https://speakerdeck.com/jennybc/how -to-name-files

Stewardship

Organizing data before and beyond the project

Examples

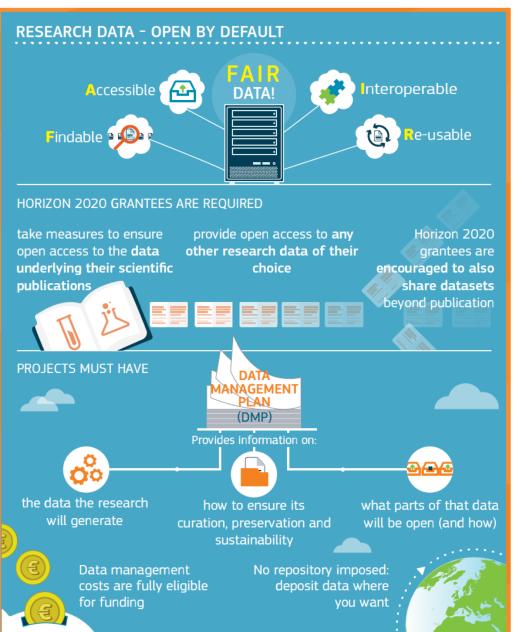
Choice of repositories
Decisions on meta data collection
Archival
Long-term care of valuable digital
assets for additional discovery and
downstream investigations
Notably includes all digital objects
including documentation and

Data stewardship wizard





Do you need a data management plan?





http://ec.europa.eu/research/openscience



An Example Project: CSBdpwAP*

- * Complex, sensitive, bulky data project with actual people
- Project on a complex disease
 - Human patient data
 - Genetic data
 - Animal models
- Public sources
- Data contributed by the project partners
- Data generated during the project on samples provided by the partners





Issues of data stewardship

- Data sharing across institutions
 - Data is only shared if required
 - Data deposited to public repositories is only a slice of existing
 - Data sharing agreements not in place
 - Note that GDPR requires contracts for processing of sensitive data
- Responsible principal investigators far removed from data handling
- People handling data do not sit at the Steering Committee
- Access to storage limitations
- Data is thrown together in directories without provenance
- Data is to be deposited in a complex database that never the PostDoc never finishes
- People leave the project and/or academic research





Open data

Embargoed until publication
Only the required slice of data published
Data published without accompanying analysis questionable





Perspectives

When make data open?

- On production
- On publication
- On end of the project
- Take your filthy hands of my data

Who owns data anyway?

- Principal investigator
- Institutions
- Funding bodies
- Patients donating samples





Thank you for your attention!



