



One last presentation about reproducibility

Xavier Meyer
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Reproducibility and the SFNS

Summary of our previous discussions

SFNS Open research data

What is it ?

How does it impact you ?

What you have to know!

Reproducibility and collaboration

Enhance reproducibility / collaboration in the lab

- How to manage data

- How to share/archive data

Manuscripts and collaboration

- Can we do better than email exchanges ?

More help (2) !

Non-profit repository that delivers you DOI

[Dryad](#)

[zenodo](#) (Thanks Iakov!)

Take home message

Document

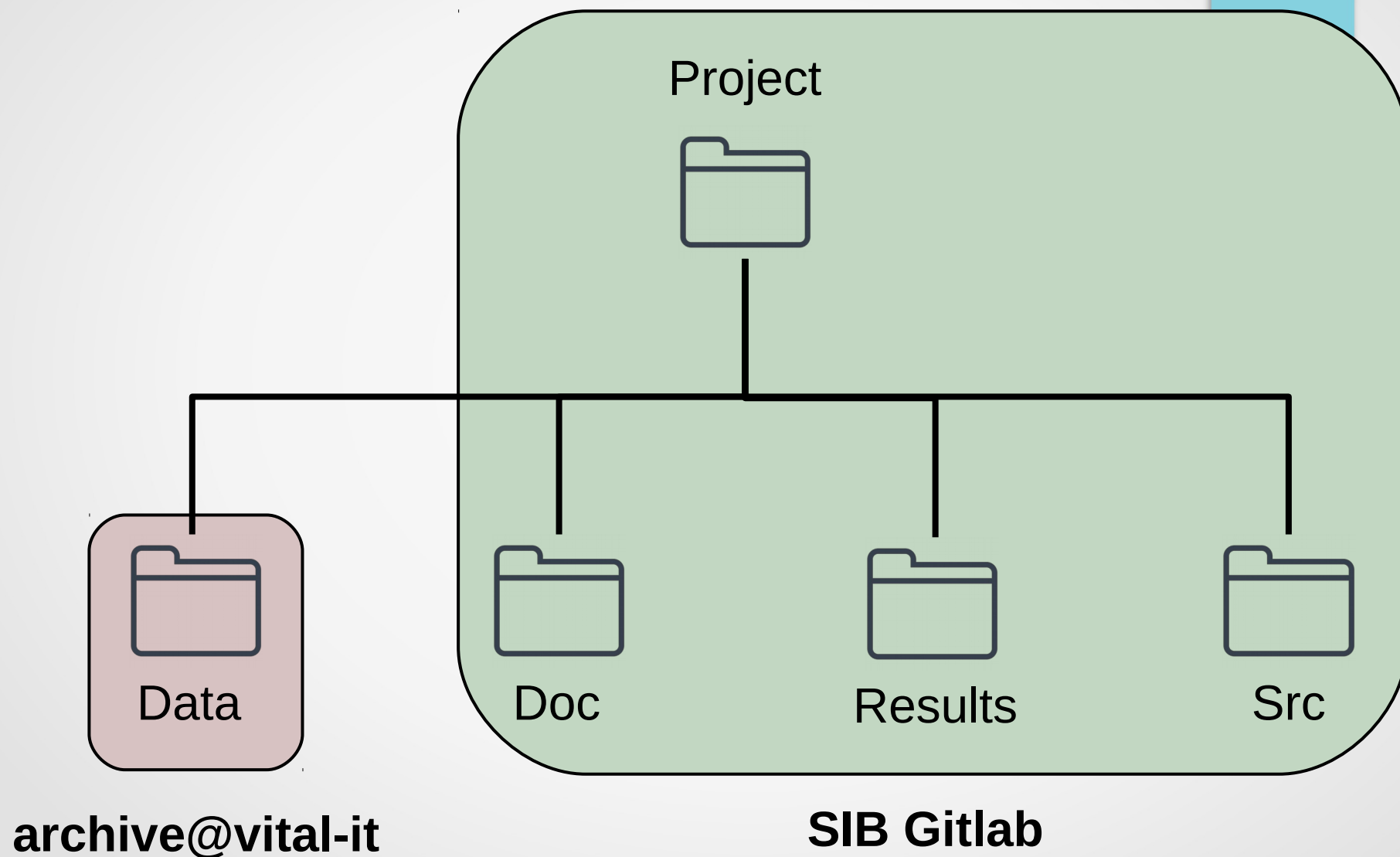
Embed within the resource when possible

Track how results were produced

Provide an easy and direct way to reproduce

Archive and share

A group strategy for archiving / sharing



Resources

Previous presentations and resources

Tutorials, Example, etc.

<https://gitlab.isb-sib.ch/phylo/labTest>

Collaborative PDF manager and organizer

<http://phylodb.unil.ch/librarian/>



SNFS Open Research Data

What are “Research data” ?

Factual materials

collected, observed or generated

Accepted as necessary to

document and validate

Our research findings

Simply put:

Everything you use in your publications!

SNFS Open Research Data

SNSF directives regarding data management

Archiving, documenting and sharing data

Fundamental for scientific research

Impact, transparency and reproducibility

Why do we care about the directives?

Mandatory for new SNFS projects

Since October 2017

Does it affects you ?

Project applications must include

- a Data Management Plan (DMP)

- DMP must detail the life-cycle of your project's data

DMP are not evaluated as part of the scientific project

DMP are validated after a project is accepted

Incomplete DMP can lock the grant until correction

DMP must be updated at the end of the grant



What the SNSF expects from you!

Data management

Store data you produced or worked on

Provided metadata and data

sufficiently to ensure reusability

Share these (meta)data with others

Deposit data and metadata onto repositories

findable, accessible, reusable

without restrictions

You are not alone...

Use *supported* Domain Data Protocols

Guidelines to follow by domain

[European list of DDP](#)

For life science → [Elixir](#)

Repositories

E.g. PDBe, Ensembl

Recommendations

E.g. Software implementation, interoperability

And if you are alone...

General guidelines : be FAIR

Findable

Accessible

Interoperable

Reusable

Detailed resources about FAIRness

SNSF principles

Scientific article

Findable

Data are described with rich metadata

(Meta)Data must have an identifier

globally unique and persistent (e.g. DOI)

Metadata must include the identifier...

of the data it describes clearly and explicitly

(Meta)Data are registered or indexed

in a searchable resource

Accessible

(Meta)Data are retrievable by their identifier

Using a standardized communications protocol

Open, free and universally implementable

Allowing for controlled access, if necessary

Metadata are accessible

Even when the data are no longer available

Interoperability

(Meta)Data use a “format”

formal, accessible, shared, and broadly applicable

(Meta)Data use FAIR vocabularies

(Meta)Data include qualified references
to other (Meta)Data

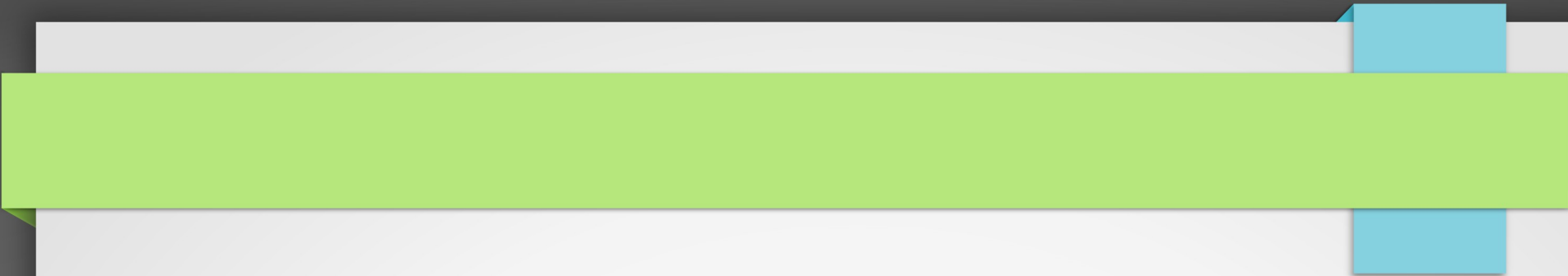
Reusable

(Meta)Data are richly described

(Meta)Data are released with data usage license

(Meta)Data are associated with detailed provenance

(Meta)Data meet domain-relevant community standard



Your job as a project applicant
and good to know if you are participant...

The Data Management Plan

Represents a notice of intention

Contains four sections

- Data collection and documentation

- Ethics, legal and security issues

- Data storage and preservation

- Data sharing and reuse

Data collection and documentation

What data will you Interact with?

Collected, observed, generated or re-used data

How will the data be aquired?

What metadata will you provide with the data?

The Data Management Plan

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Ethics, legal and security issues

How will ethical issues be addressed and handled?

How will data access and security be managed?

How will you handle copyrights?

Data storage and preservation

How will your data be stored and backed-up?

During the research

What is your data preservation plan?

Data sharing and reuse

How and where will the data be shared?

Are there any need to protect sensitive data?

Are you using FAIR repositories? (e.g. dryad)

Are you using for profit maintained repositories?

If so why?

More help (1) !

Data Life-Cycle Management

Joint project from Swiss University

Aiming to help researchers to manage their data

DLCM portal informs about

- DMP template with example**

- Training & education

- Long term preservation

More help (2) !

Non-profit repository that delivers you DOI

[Dryad](#)

[zenodo](#) (Thanks Iakov!)

Thank you for your attention!

This presentation will be archived

Gitlab → labTest



Science Bonus



Bonta, Mark, et al. 2017.

“Intentional Fire-Spreading by ‘Firehawk’ Raptors in Northern Australia.”

Journal of Ethnobiology 37 (4): 700–718.