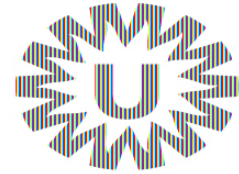# Data Stewardship Best Practices

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Data Stewardship

Long-term and sustainable care for your research data
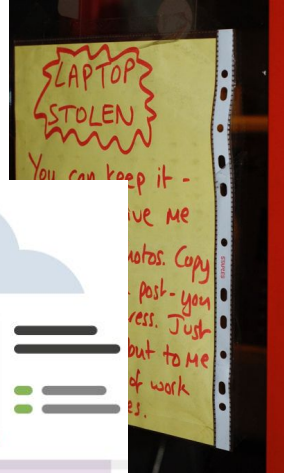
When:

Before start of project

During your project

After your project

Why data stewardship?

Meet legal standards

Nieuwe privacywetgeving
vanaf 25 mei 2018
De AVG in een notendop

Op basis hiervan mag je persoonsgegevens verzamelen
De grondslag

Toestemming van de gebruiker · Vitale belangen · Wettelijke verplichting · Overeenkomst · Algemeen belang · Gerechtvaardigd belang

Het begint aan de tekentafel
Zorgvuldigheid

Functionaris gegevens-bescherming · Privacy by design · Impact assessment

_ni_p on Flickr_

At the start of your project

Create a data management plan!

- Are you re-using data?
- Do you have enough resources available?
- Legal contracts in place?
- Agreements about data publication and 'ownership'?
- Thought about metadata?

ELSI helpdesk

DTL DMP wizard

During your project

- Evaluate and update your DMP every year
- Store your data in a correct and clear way
- Add metadata already during the project

- Think about security!
- Make use of handy tools!

Security

- No personally identifiable information on devices
- Encryption of hard drives
- Secure data transfer
  - Encryption of email (attachments)
  - Check data integrity
  - SFTP server
  - Surfdrive
- Do not use one password for all your (internet) accounts
- Proper key management
- Set up two-factor authentication when possible

Github

- Version management of your code
- Short (1h) introduction available:
  https://services.github.com/on-demand/intro-to-github/
- Publish your code!
- GitFlow

Alternatives: GitLab,

BitBucket (Git) or SVN-based.
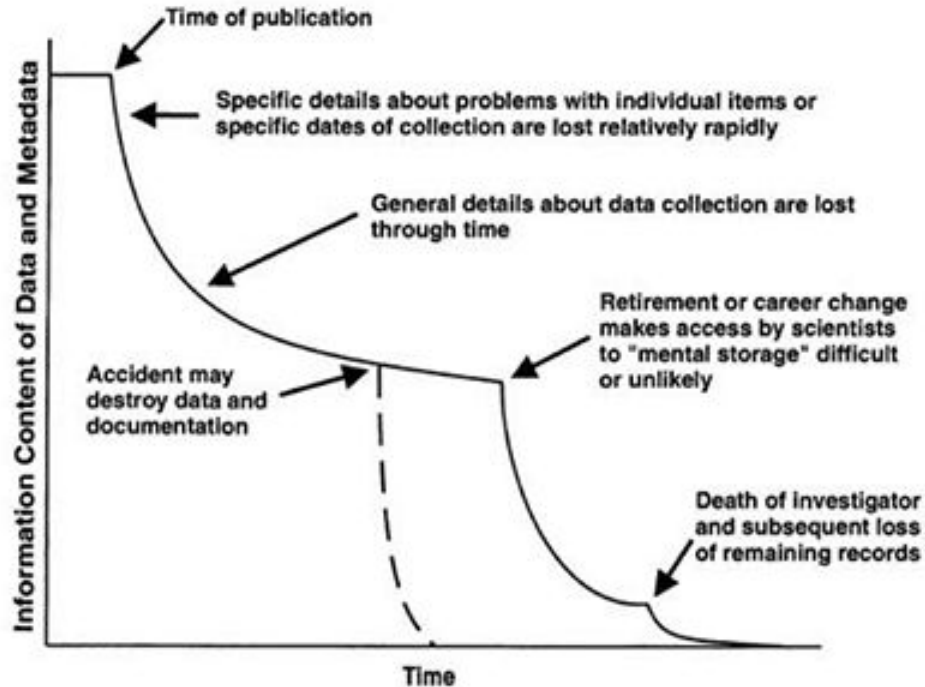
Protocols.io

- Interactive protocols for:
    - Lab
    - Bioinformatics
    - General workflow descriptions
- View on mobile devices
- Use for publication of methods!

After finishing your project

Time of publication

Specific details about problems with individual items or specific dates of collection are lost relatively rapidly

General details about data collection are lost through time

Retirement or career change makes access by scientists to "mental storage" difficult or unlikely

Accident may destroy data and documentation

Death of investigator and subsequent loss of remaining records

Information Content of Data and Metadata

Time

Michener et al. 1997

FAIRification

- Think about what you would like to FAIRify
- Create data model
- Select ontologies
- Convert your files
  - Using in-house script
  - DTL FAIRifier
- Publish them to a FAIR data point (together with original files)

References

HANDS:

http://data4lifescience.nl/hands/handbook-for-adequate-natural-data-stewardship/

Icons made by Dave Gandy from www.flaticon.com.

GitFlow: https://leanpub.com/git-flow/read