



**GHENT
UNIVERSITY**

BREAK-OUT SESSION: RESEARCH DATA MANAGEMENT

LW Research Day 09/09/2019 - Frederic Lamsens (Faculty IT Department) and Lien Vanmarsnille (Faculty Library)

OUTLINE

- Introduction
- Research Data in the Humanities
- Data Management Planning
- Data Management @Ghent University
- Data Storage
- Writing a DMP

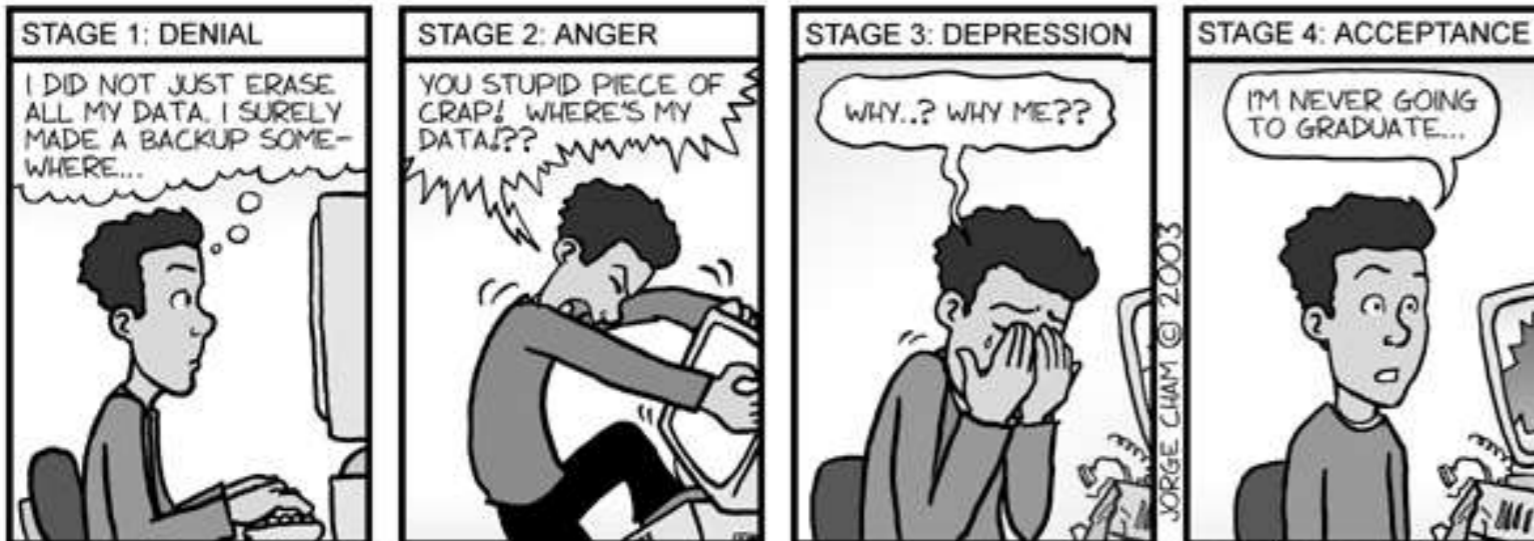


INTRODUCTION

HAVE YOU EVER BEEN IN THIS SITUATION?



THE FOUR STAGES OF DATA LOSS DEALING WITH ACCIDENTAL DELETION OF MONTHS OF HARD-EARNED DATA



www.phdcomics.com

@Jorge Cham

www.phdcomics.com



WHAT IS RESEARCH DATA MANAGEMENT?

Data management refers to activities and practices that support **long term preservation, access, and (re)use** of data:

- Collecting
- Organising
- Formatting
- Documenting
- Controlling access
- Storing and sharing
- Anonymizing

→ Goal: Findable Accessible Interoperable Reusable research data

RESEARCH DATA IN THE HUMANITIES

RESEARCH DATA IN THE HUMANITIES

Challenges:

“Conceptualising something as data is itself a scholarly act.”¹

- Humanist researchers don't always think of their sources/outputs as 'data'
- Huge variety between and within disciplines
- Non-digital material

RESEARCH DATA IN THE HUMANITIES



The image shows a blurred view of a data table with numerical values. The table is organized into columns and rows, with the text being out of focus. The visible numbers include:

567	109,7	154	10,4	1,7	-0,04	11,89
24	234,7	178	16,7	0,4	0,00	13,87
911	780,8	101	10,5	0,3	0,11	10,07
12	110,6	109	13,7	0,7	-0,02	11,93
67	120,5	120	15,1	1,8	0,01	10,1
2	143,6	107	16,3	1,2	0,08	11
25	439,8	103	14,5	0,4	0,00	11
5	284,7	106	14,3	0,1	0,13	
8	340,5	119	11,8	0,3	0,00	
3	567,8	104	10,3	1,1	-0,06	
	408,2	126	11,8	1,9	-0,0	
		166	13,2			

RESEARCH DATA IN THE HUMANITIES



24	109,7	178	16,7	1,7	0,00	11,89
911	234,7	101	10,5	0,4	0,11	15,87
12	780,8	109	13,7	0,3	-0,02	10,97
67	110,6	120	15,1	0,7	0,01	11,93
2	120,5	107	16,3	1,8	0,08	10,1
25	143,6	103	14,5	1,2	0,00	11
5	439,8	106	14,3	0,4	0,13	
8	284,7	119	11,8	0,1	0,00	
3	340,5	104	10,3	0,3	-0,06	
	567,8	126	11,8	1,1	-0,0	
	408,2	166	13,2	1,9		

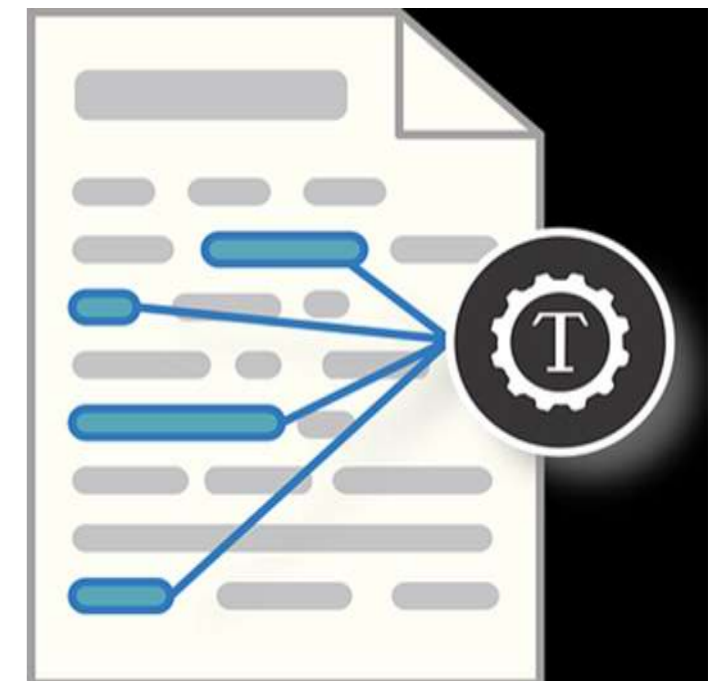


RESEARCH DATA IN THE HUMANITIES

24	109,7	178	16,4	1,7	0,04	11,89
911	234,7	101	16,7	0,4	0,11	15,87
12	780,8	109	10,5	0,3	0,11	10,97
67	110,6	120	13,7	0,7	-0,02	11,93
2	120,5	107	15,1	1,8	0,01	11,93
25	143,6	107	16,3	1,2	0,08	10,1
5	439,8	103	14,5	1,2	0,00	
8	284,7	106	14,3	0,4	0,13	
3	340,5	119	11,8	0,1	0,00	
	567,8	104	10,3	0,3		
	408,2	126	11,8	1,1		
		166		1,9		



Thomas Mann: Der Tod in Venedig. Novelle. [1] Berlin: S. Fischer 1913; Wikimedia: Foto H.-P.Haac



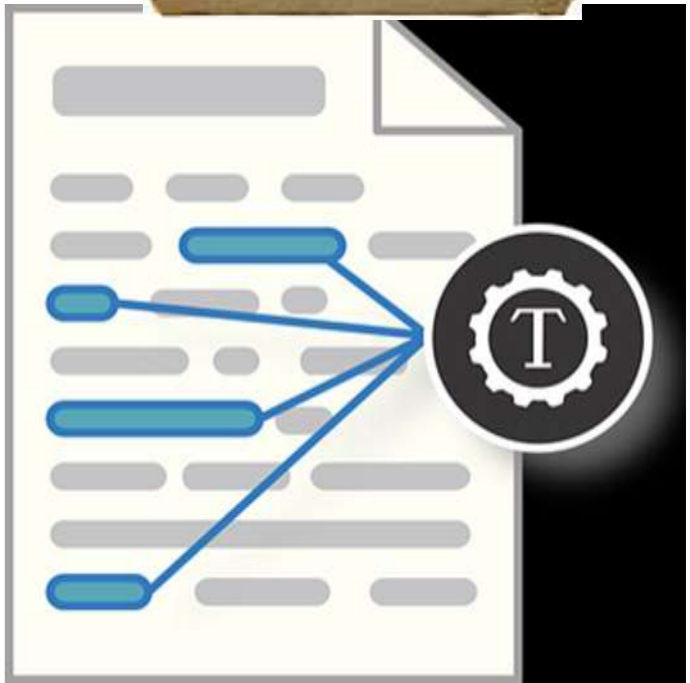
RESEARCH DATA IN THE HUMANITIES

24	109,7	178	16,4	1,7	0,04	11,89
911	234,7	101	16,7	0,4	0,11	15,87
12	780,8	109	10,5	0,3	-0,02	10,07
67	110,6	120	13,7	0,7	0,01	11,93
2	120,5	107	15,1	1,8	0,08	10,1
25	143,6	103	16,3	1,2	0,00	11
5	439,8	106	14,5	0,4	0,13	11
8	284,7	119	14,3	0,1	0,00	11
3	340,5	104	11,8	0,3	0,00	11
	567,8	126	10,3	1,1	-0,06	11
	408,2	166	11,8	1,9	-0,0	11



RESEARCH DATA IN THE HUMANITIES

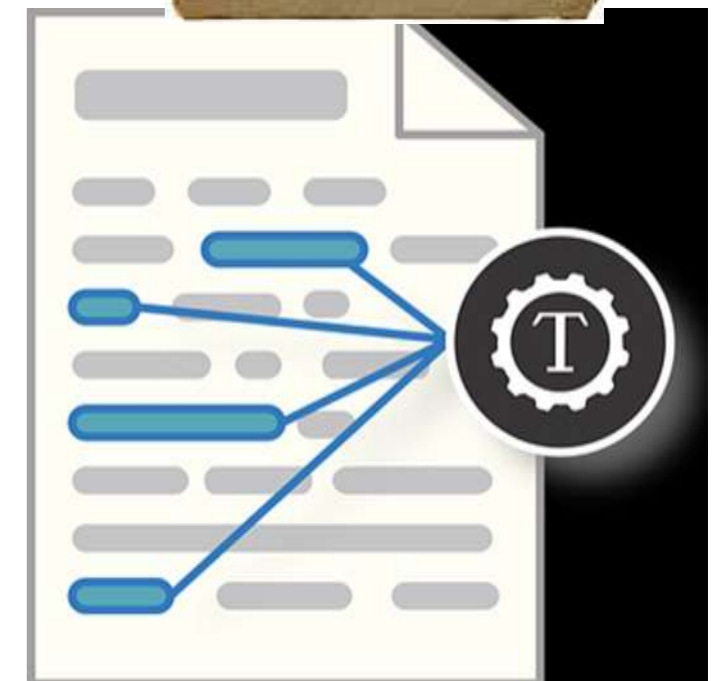
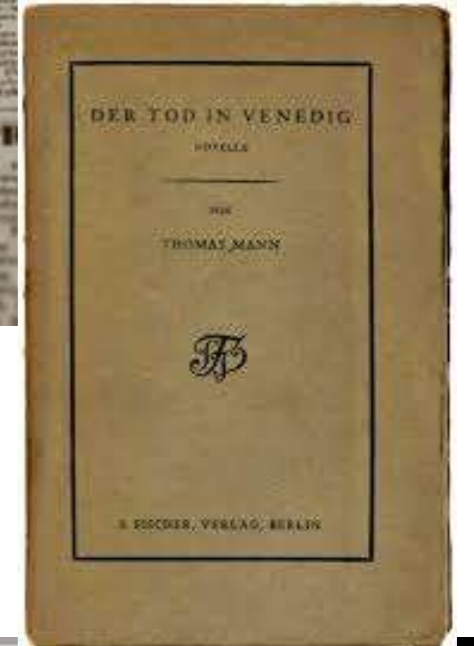
24	109,7	178	18,4	1,7	0,04	11,89
911	234,7	101	16,7	0,4	0,11	15,87
12	780,8	109	10,5	0,3	-0,02	10,97
67	110,6	120	13,7	0,7	-0,01	11,93
2	120,5	107	15,1	1,8	0,08	10,1
25	143,6	103	16,3	1,2	0,00	11
5	439,8	106	14,5	0,4	0,13	
8	284,7	119	14,3	0,1	0,00	
3	340,5	104	11,8	0,3	-0,06	
	567,8	126	10,3	1,1	-0,0	
	408,2	166	11,8	1,9		



RESEARCH DATA IN THE HUMANITIES



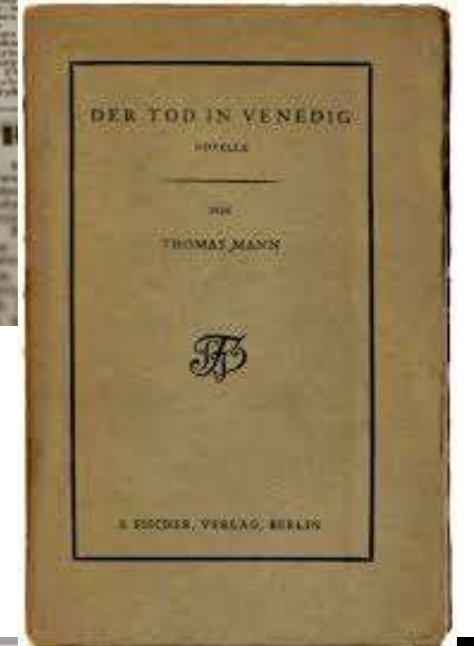
24	109,7	178	18,4	1,7	0,00	11,89
911	234,7	101	16,7	0,4	0,11	15,87
12	780,8	109	10,5	0,3	-0,02	10,97
67	110,6	120	13,7	0,7	-0,01	11,93
2	120,5	107	15,1	1,8	0,01	10,1
25	143,6	103	16,3	1,2	0,08	11
5	439,8	106	14,5	0,4	0,00	11
8	284,7	119	14,3	0,1	0,13	11
3	340,5	104	11,8	0,3	0,00	11
	567,8	126	10,3	1,1	-0,06	11
	408,2	166	11,8	1,9	-0,0	11



RESEARCH DATA IN THE HUMANITIES



24	109,7	178	18,4	1,7	0,00	11,89
911	234,7	101	16,7	0,4	0,11	15,87
12	780,8	109	10,5	0,3	-0,02	10,97
67	110,6	120	13,7	0,7	0,01	11,93
12	120,5	107	15,1	1,8	0,08	10,1
25	143,6	103	16,3	1,2	0,00	11
5	439,8	106	14,5	0,4	0,13	
8	284,7	119	14,3	0,1	0,00	
3	340,5	104	11,8	0,3	-0,06	
	567,8	126	10,3	1,1		
	408,2	166	11,8			

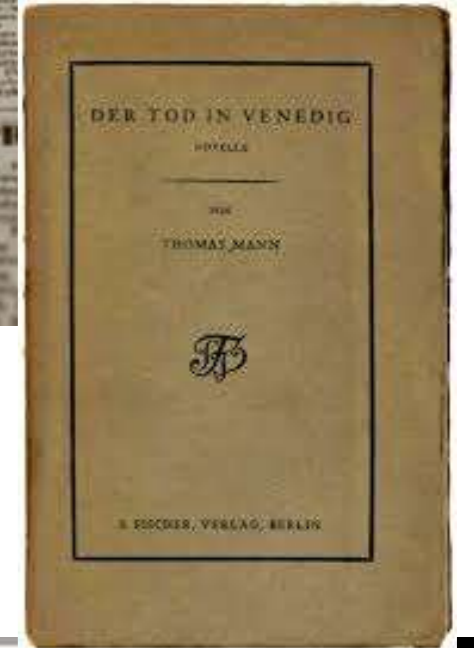


Van Eyck, J. Groeninge Museum, image provided by Lukas, Art in Flanders

RESEARCH DATA IN THE HUMANITIES

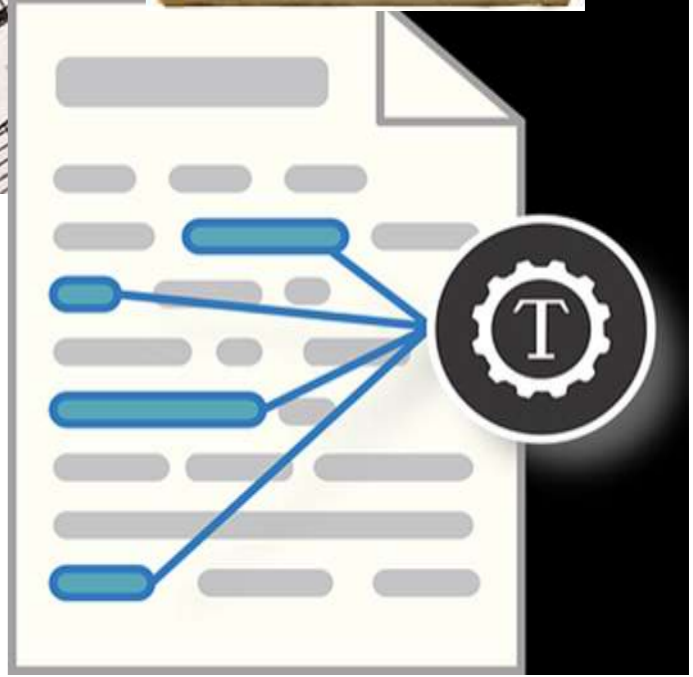


24	109,7	178	18,4	1,7	0,00	11,89
911	234,7	101	16,7	0,4	0,11	15,87
12	780,8	109	10,5	0,3	-0,02	10,07
67	110,6	120	13,7	0,7	0,01	11,93
2	120,5	107	15,1	1,8	0,08	10,1
25	143,6	103	16,3	1,2	0,00	11
5	439,8	106	14,5	0,4	0,13	
8	284,7	119	14,3	0,1	0,00	
3	340,5	104	11,8	0,3	-0,06	
	567,8	126	10,3			
	408,2	166	11,8			



RESEARCH DATA IN THE HUMANITIES

24	109,7	178	18,4	1,7	0,04	11,89
911	234,7	101	16,7	0,4	0,11	15,87
12	780,8	109	10,5	0,3	-0,02	10,97
67	110,6	120	13,7	0,7	0,01	11,93
2	120,5	107	15,1	1,8	0,08	10,1
25	143,6	103	16,3	1,2	0,00	11
5	439,8	106	14,5	0,4	0,13	
8	284,7	119	14,3	0,1	0,00	
3	340,5	104	11,8	0,3	-0,06	
	567,8	126	10,3	1,1		
	408,2	166	11,8	1,9		



Van Eyck, J. Groeninge Museum, image provided by Lukas, Art in Flanders

RESEARCH DATA IN THE HUMANITIES

Zotero Library List:

Title	Creator	Year
Guerre, maladie, empire. Les services de santé militaires en ...	Zaugg	2016
Officiers de santé et soignantes créoles face à la fièvre jaune	Nobi	2016
The Emergence of Tropical Medicine in France	Osborne	2014
Colonial Disease, Translation, and Enlightenment: Franco-Briti...	Charters	2014
Trading in Drugs through Philadelphia in the Eighteenth Centu...	Wilson	2013
The Medicines Trade in the Portuguese Atlantic World: Acquisi...	Walker	2013
Leprosy and Slavery in Suriname: Godfried Schilling and the Fr...	Snelders	2013
Medical Experimentation and Race in the Eighteenth-century ...	Schiebinger	2013
The Circulation of Bodily Knowledge in the Seventeenth-centu...	Gómez	2013
Circulation of Medicine in the Early Modern Atlantic World	Cook and Walker	2013
Synthesis of scholarship on "medicines" to restore focus o...		
Full Text PDF		
Colonial Medical Encounters in the Nineteenth Century: The Fr...	Thoral	2012
Networks in Tropical Medicine: Internationalism, Colonialism, a...	Neill	2012
Early Clinical Features of Dengue Virus Infection in Nicaraguan...	Biswas et al.	2012
Medicine in an age of commerce and empire: Britain and its tr...	Harrison	2010
Finding the "Ideal Diet": Nutrition, Culture, and Dietary Practic...	Neill	2009
Battles of the Self: War and Subjectivity in Early Modern France	Pichichero	2008
The Experiments of Ramón M. Termeyer SJ on the Electric Eel ...	de Asúa	2008
Psychiatry and Empire	Mahone and Vaughan	2007
Medicine and the Market in England and Its Colonies, C.1450-...	Jenner and Wallis	2007
Matters of exchange: commerce, medicine, and science in the...	Cook	2007
A Horrible Tragedy in the French Atlantic	Rothschild	2006
"Neither of meate nor drinke, but what the Doctor alloweth": ...	Chakrabarti	2006
Transnationalism in the colonies: Cooperation, rivalry, and rac...	Neill	2005
Variolation, Vaccination and Popular Resistance in Early Coloni...	Brimnes	2004
"Syphilis, Opiomania, and Pederasty": Colonial Constructions ...	Proschan	2003
Choosing Scientific Patrimony: Sir Ronald Ross, Alphonse Lav...	Guillemin	2002
Madness and Colonization: Psychiatry in the British and Frenc...	Keller	2001
The Colonial Machine: French Science and Colonization in the ...	McClellan and Rego...	2000
From medical astrology to medical astronomy: sol-lunar and pl...	Harrison	2000
Disease and Empire: The Health of European Troops in the Co...	Bynum	2000
Climate & Constitutions: Health, Race, Environment and Pri...	Harrison	1999

Article View: Circulation of Medicine in the Early Modern Atlantic World

- Item Type: Journal Article
- Title: Circulation of Medicine in the Early Modern Atlantic World
- Author: Cook, Harold J.
- Author: Walker, Timothy D.
- Abstract: The search for powerful drugs has caused people and commodities to move around the globe for many centuries, as it still does...
- Publication: Social History of Medicine
- Volume: 26
- Issue: 3
- Pages: 337-351
- Date: 2013/08/01
- Series: Soc Hist Med
- Series Title: Soc Hist Med
- Series Text: Soc Hist Med
- Journal Abbr: Soc Hist Med
- Language: en
- DOI: 10.1093/shm/hkt013
- ISSN: 0951-631X
- Short Title: Soc Hist Med
- URL: <https://academic.oup.com/shm/article/26/3...>
- Accessed: 1/24/2018, 10:17:12 AM
- Archive: Yes
- Loc. in Archive: Yes
- Library Catalog: Yes
- Call Number: Soc Hist Med
- Rights: All Rights Reserved
- Extra: Yes
- Date Added: 1/24/2018, 10:17:12 AM
- Modified: 1/24/2018, 11:50:15 AM

RESEARCH DATA TYPES

- **Content:** numerical, textual, audio-visual, multimedia... data
- **Data formats:** spreadsheets, databases, marked-up text, images, audio-visual recordings, maps...
- **Mode of data collection:** experimental, observational, derived/compiled...
- **Primary versus secondary:** original data created in context of research project vs reuse of existing data
- **Digital vs non-digital** (digital-born versus digitised vs analogue data)
- **Level of processing:** raw, processed or analysed data

DATA MANAGEMENT PLANNING

WHY?

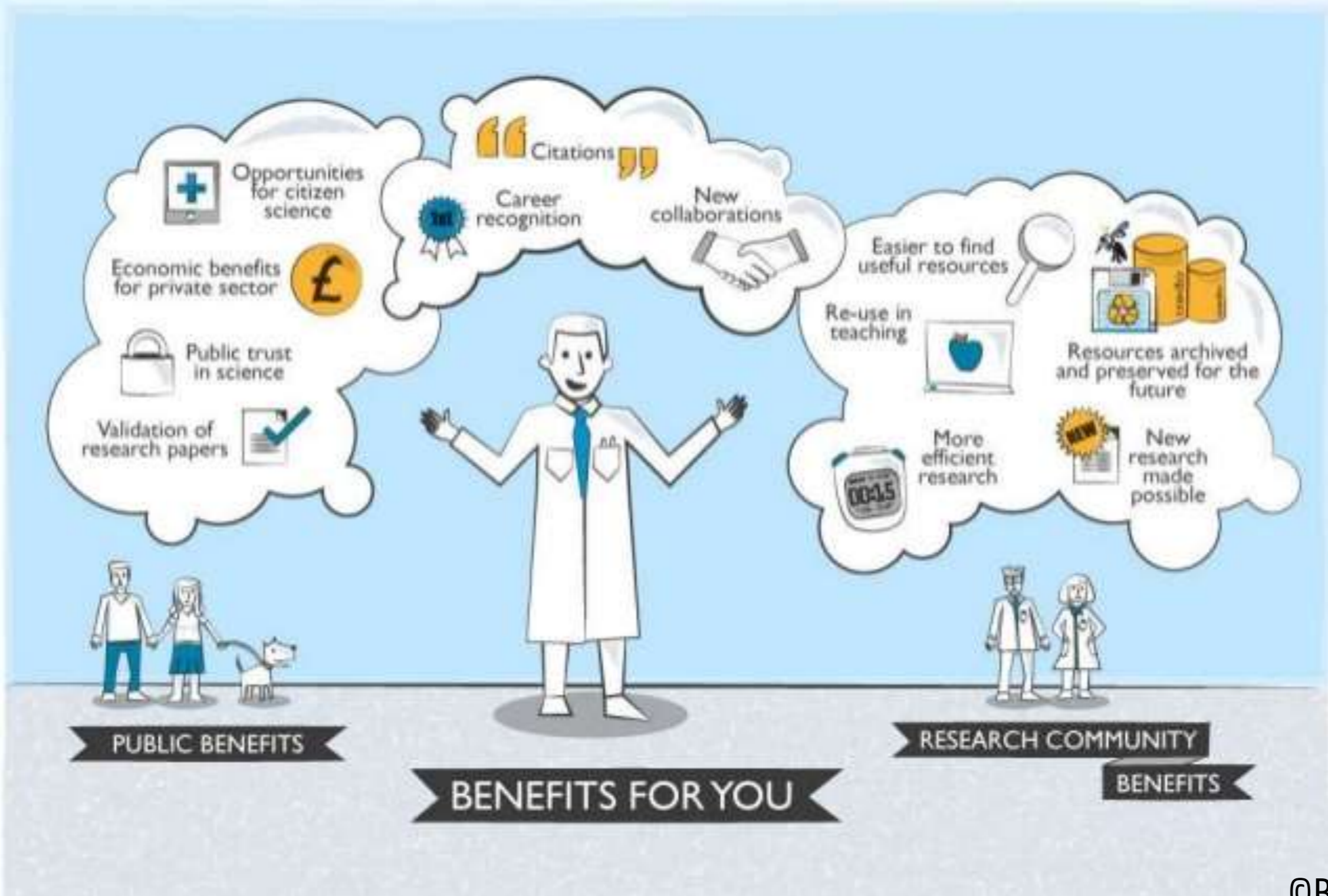
Planning takes time and effort upfront,

BUT

- Saves time and headaches (e.g. data loss) in the long run
- Allows secondary analysis, replication and reuse for future research
- Formalizes expectations, roles and responsibilities
- Stimulates transparency, openness and research integrity
- Increases visibility and impact of your work
- Is required by an increasing number of funding agencies

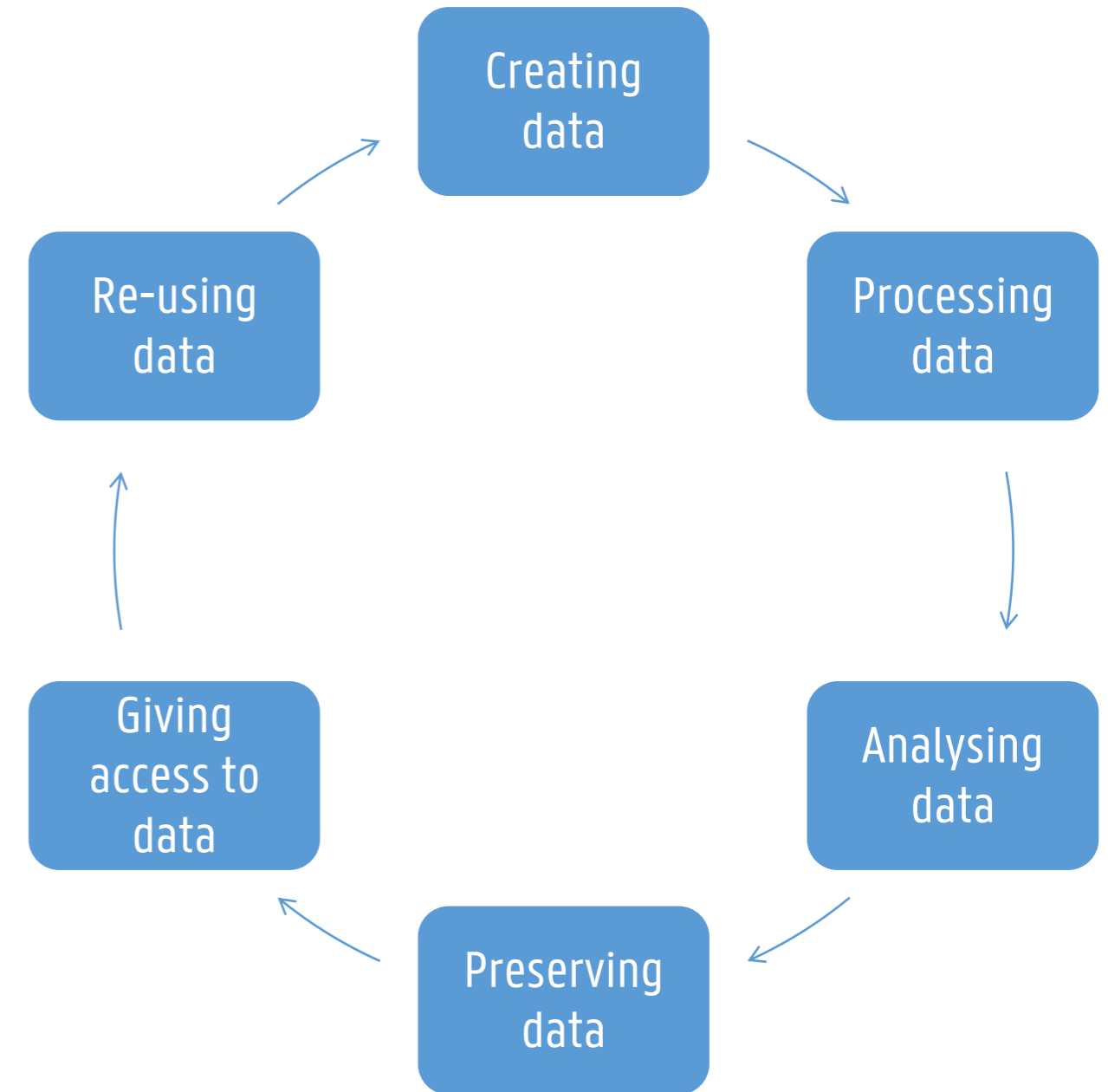
→ It helps you to **do better research**

BENEFITS FOR MANAGING AND SHARING RESEARCH DATA



WHEN?

- Implement and review RDM **throughout** your research
- **Research data life cycle**: describes the steps to be taken at the different stages of the research cycle



Adapted from UK Data Archive

HOW?

Write a **data management plan (DMP)**:

→ A 'living' document which outlines how research data will be handled during and after a project

DATA MANAGEMENT @ GHENT UNIVERSITY

GHENT UNIVERSITY RDM POLICY

- Since 2016: adoption of institutional [RDM policy framework](#)

This policy framework aims to develop and promote a solid management of research data, in order to increase the efficiency, quality, integrity and transparency of scientific research, as well as to facilitate the development of new knowledge, and to ensure compliance with relevant laws and regulations, ethical and contractual obligations, and provisions of external research funders.

- DMP: not required yet, but encouraged
- For each research project: obligation to preserve relevant data for min. 5 years
- 2019: UGent has been recruiting 6 data stewards – to start in Sept./ Oct.

FWO RDM REQUIREMENTS

— Gradual implementation:

Application round 2018: project supervisors only (fundamental and strategic basic research)

Application round 2020: + pre/postdoctoral fellows

— Requirements:

Write a DMP

Preserve data for min. 5 years after end of research

FWO DMP

- 1. Proposal stage**
 - Answer 5 questions in DMP-section of the FWO application form
- 2. Post-award (all projects started on or after 01/01/2019)**
 - Develop a full DMP via FWO template in [DMPonline.be](https://dmponline.be)
 - Submit to host institution no later than 6 months after start project (for Ghent University: Research Co-ordination Office: vlaams-federaal@ugent.be)
- 3. Upon completion project**
 - Submit final DMP to FWO along with report on completed research

WORKING WITH PERSONAL DATA

What if your project involves research with personal data?

2 scenario's:

1. If you have to prepare a full DMP:

→ Register your processing activities at the same time as drafting your FWO DMP in [DMPonline.be](https://dmponline.be)

2. If you are not writing a full DMP or if you already created your FWO DMP before 01/04/2019:

→ Use the specific UGent template “GDPR record” in [DMPonline.be](https://dmponline.be). This only contains the GDPR questions and will appear when you indicate that you will process personal data.

→ Each GDPR record/ DMP with GDPR questions is also automatically shared with Hanne Elsen, UGent's Data Protection Officer.

DATA STORAGE

@ GHENT UNIVERSITY

STORING YOUR DATA – DURING YOUR RESEARCH

- Storing data during a research project has to be a flexible process.
- Data should be easy accessible but at the same time safe and robust.

Local storage

- Local storage = hard drives, external drives, memory sticks ...
- Fast, easy access, cheap, portable, expandable
- Risky!
 - in terms of data loss
 - in terms of privacy protection
- Only use local storage if you have an effective backup strategy

STORING YOUR DATA – DURING YOUR RESEARCH

Network storage ('shares')

- Storage available as a network drive
- Fast, reliable, safe (snapshots, backups on tape, integrity checks)
- Online application form (50GB? 2TB? Just ask!)
- Data can be shared (with UGent members only)
- Preferably, use a network share as your primary workplace
- If using a network drive is not an option, keep a synchronized copy of your local data on a network drive

STORING YOUR DATA – DURING YOUR RESEARCH

OneDrive for Business

- 1 Terabyte personal cloud storage
- Local data is synced to the cloud
- Data is offline available (sensitive data should be encrypted)
- Data can be shared (with UGent members only)

Cloud services (other than OneDrive for Business)

- Dropbox, Google Drive, Box ...
- Should be avoided according to the UGent information security policy

STORING YOUR DATA – AFTER YOUR RESEARCH

After a project is finalised, data should be stored long-term

What data?

- Ideally, data is preserved in its rawest possible form, documented in such a way that the data is understandable and reported results are reproducible.

Where to store your data?

- Copy your data to a network share
- Deposit your datasets to a (public) data repository
 - ensures that your data is discoverable, accessible and preserved
 - ensures that people can refer to (the correct version of) your data
 - good starting point: Registry of Research Data Repositories (Re3Data.org)

DATA ENCRYPTION

What?

Making data unreadable so that only people with the correct key or password can access the data.

When?

For personal or sensitive data

When stored on local storage

When stored in the cloud

When transmitted over the internet (transmission)

No key, no data!

For a how-to (in Dutch): <https://helpdesk.ugent.be/security/encryptietools.php>

WRITING A DMP

DMPONLINE.BE

- Contains DMP templates and guidance (from funders such as FWO, or institutional)
- Log in at <https://dmponline.be/> with your UGent username and password (or with your ORCID Id)

Welcome

We can help you write and maintain data management plans for your research.

This instance of DMPonline is provided by the DMPbelgium Consortium, which was founded in 2017 by:

Instituut voor Natuur- en Bosonderzoek
Université Libre de Bruxelles
Universiteit Antwerpen
Universiteit Gent
Universiteit Hasselt
Vrije Universiteit Brussel
Wetenschappelijk Instituut Volksgezondheid – Institut Scientifique de Santé Publique (Sciensano)

In 2018 they were joined by:

Université Catholique de Louvain
Université de Liège
Université de Mons
Université de Namur
Vlaamse Instelling voor Technologisch Onderzoek

Interested in joining the Consortium?

Sign in

with your institutional account

[Sign in with Sciensano](#)

[Sign in with UAntwerp](#)

[Sign in with UCLouvain](#)

[Sign in with UGent](#)

[Sign in with UHasselt](#)

[Sign in with ULB](#)

[Sign in with ULiège](#)

[Sign in with UMons](#)

[Sign in with UNamur](#)

[Sign in with VITO](#)

[Sign in with VUB](#)

or with your ORCID iD

[Sign in with ORCID](#)

Create a new plan

Please select from the following drop-downs so we can determine what questions and guidance should be displayed in your plan.

Project title (required)

- I will not process personal data
- I will process personal data

Personal data are any information relating to an identified or identifiable natural person, i.e. a living individual. Examples include but are not limited to names, occupations, (email) addresses, dates of birth, phone numbers, passport numbers, IP addresses, bank account numbers, physical characteristics, information about home ownership, health-related information, voice recordings, photographs etc.

Processing entails any operation on (sets of) personal data, whether by automated means or not. This includes collecting, recording, structuring, storing, using, disseminating, erasing data etc.

If applying for funding, select your research funder.

Otherwise leave blank.

Name of funder, if applicable.

--Select your funder--

--Select your funder--

European Commission (Horizon 2020)
Fonds voor Wetenschappelijk Onderzoek
European Research Council

To see institutional questions and/or guidance, select your organisation.

You may leave blank or select a different organisation to your own.

Choose a template*

There are a number of possible templates you could use. Please choose one.

GDPR Record [GDPR]

FWO Research Project

Plan details

Application DMP

Full DMP +

Share

Export

This page gives you an overview of your plan. It tells what your plan is based on and gives you an overview of the questions that you will be asked.

Edit plan details

Project name | FWO Research Project

ID | -

Grant title | -

Description | -

Principal Investigator/Researcher | Lien Vanmarsnille

Plan data contact

This plan is based on:

Funder | Fonds voor Wetenschappelijk Onderzoek

Institution | Ghent University

Template for FWO-funded research, based on the FWO Data Management Plan guidelines (available online: www.fwo.be/en/the-fwo/organisation/data-management-plan).

As of 2018, the FWO has made Research Data Management (RDM) a key element of its policy for all support channels. This entails new requirements for researchers, e.g. regarding data management planning. Supervisors of fundamental and strategic basic research projects (from the application round 2018) and PhD/postdoctoral fellows (from the application round 2020) are expected to:

- complete a short "Data Management Plan (DMP)" section in the FWO electronic application form
- submit a full DMP **no later than 6 months after the start** of the research project or the PhD/postdoctoral fellowship
- append a **final DMP**, which may have been updated since the first version of the full DMP, to the final report on the completed research

Application DMP

Full DMP +

Use 'Plan Details' to provide basic info about your project

'Application DMP' tab covers the 5 RDM questions of your FWO application form

Set of questions for the full DMP appears.

You can give other users access to your plan and clarify each collaborator's role here

Export your full DMP in .pdf, .docx or .txt

Plan details

Application DMP

Full DMP +

1. General Information (3 questions, 0 answered) +

2. Data description (2 questions, 0 answered) -

Will you generate/collect new data and/or make use of existing data?

- Generate new data
- Reuse existing data

Comment

B *I* [List icons] [Link icon] [Table icon]

[Empty text area with scroll bar]

Save

Not answered yet

Describe the origin, type and format of the data (per dataset) and its (estimated) volume.

B *I* [List icons] [Link icon] [Table icon]

[Empty text area]

Guidance Add comment

UGent guidance on Existing Data +

Leave a comment for collaborators

Check custom guidance from FWO/UGent

Guidance Add comment

Guidance -

If you **reuse** existing data, specify the **source** of these data. Distinguish data **types** (the kind of content) from data **formats** (the technical format).

Question

Enter your answer (various formats possible) and (if you wish) add a comment

WHAT TO COVER IN YOUR DMP?

- Full DMP covers 7 sections:
 1. Data description
 2. Ethical & legal issues
 3. Documentation & metadata
 4. Data storage & backup during the FWO project
 5. Data preservation after the end of the FWO project
 6. Data Sharing and reuse
 7. Responsibilities
- + (if applicable): GDPR section

TIPS

- It is a living document. If you don't know the answer yet, just say so (and update later). When plans change, adapt it.
- It is not always about right/wrong, but justify your decisions (in the 'comments' box).
- Check applicable policies (UGent, FWO, H2020, contracts).
- Have a look at example DMPs and follow best practices in your field.

GHENT UNIVERSITY RDM SUPPORT

- RDM website: <https://www.ugent.be/en/research/datamanagement>
- Funder requirements: <https://www.ugent.be/en/research/datamanagement/datamanagementplan/external-funders.htm>
- (RE)SEARCH TIP: “How do I complete the DMP section in my FWO application?”
<https://onderzoektips.ugent.be/en/tips/00001681/>
- (RE)SEARCH TIP: “DMPonline.be: how do I write a Data Management Plan?”
<https://onderzoektips.ugent.be/en/tips/00001281/>
- (RE)SEARCH TIP: “How do I register personal data processing activities?”
<https://onderzoektips.ugent.be/en/tips/000017>
- General questions: rdm.support@ugent.be
- New data stewards will soon set up an RDM support team that will provide training and feedback
- Questions about the new legislation and GDPR register: privacy@ugent.be

AT OUR FACULTY

- Starting a new project? A good place to get started:
Intranet: **Data Management Toolbox** (currently only in Dutch):
<https://www.ugent.be/lw/nl/medewerkers/onderzoek/dmtoolbox.htm>
- Technical support, questions about storage?
helpdesk.flw@ugent.be
- Feedback or guidance while writing your DMP?
lien.vanmarsnille@ugent.be (Faculty library)

DATA MANAGEMENT: TOOLBOX



FACULTEIT LETTEREN
EN WJSBEGEERTE

Home UGent In English

Zoek

OPLEIDINGEN ONDERZOEK DIENSTEN OVER DE FACULTEIT CONTACT INFO VOOR ▾

Home > [Informatie voor medewerkers](#) > [Onderzoek](#) > Datamanagement: toolbox

Op deze pagina

- [Ten geleide: een stappenplan ...](#)
- [Data Management Plan \(DMP\)](#)
- [Data Storage Fact Sheet \(DSFS\)](#)
- [Datadeponering](#)
- [Dataopslag](#)
- [Ethische Commissie](#)
- [Informed Consent](#)
- [Non Disclosure Agreement \(NDA\)](#)
- [Persoonsgegevens \(AVG/GDPR\)](#)
- [Uitdiensttreding](#)

Info Je bent aangemeld. Info op jouw maat vind je op de studentensite of op het intranet voor personeel. ×

Datamanagement: toolbox

pagina in opbouw

Ten geleide: een stappenplan ...

Bij de start van je onderzoeksproject

- ga na of je een advies van een ethische commissie nodig hebt (verplicht)
- ga na of je persoonsgegevens verzamelt (verplicht)
- maak een Data Management Plan (verplicht bij sommige financiers)

Tijdens je onderzoeksproject

- zorg voor een veilige databank

SOURCES & FURTHER READING

- Borgman, Christine L. *Big Data, Little Data, No Data : Scholarship in the Networked World*. Cambridge (Mass.) : MIT press, 2015.
- Corti, Louise, et al. *Managing and Sharing Research Data : a Guide to Good Practice*. London: Sage, 2014.
- COURSERA: [Research Data Management & Sharing](#) (MOOC)
(The university of North Carolina at Chapel Hill, The University of Edinburgh)
- www.data-archive.ac.uk
- Digital Curation Centre (for example DMPs and guidance): <http://www.dcc.ac.uk/resources/data-management-plans/guidance-examples>
- MANTRA: [Research Data Management Training](#)
(EDINA, The University of Edinburgh)
- [Research Data Management Toolkit](#) (JISC)
- RDNL: [Essentials 4 Data Support](#) (Research Data Netherlands)

Thank you for listening!

(But in case you haven't been, here is where you can find a copy of the presentation:

<https://www.lwresearchday.ugent.be/>)

Lien Vanmarsnille
FLW Library: Instruction & Support

Frederic Lamsens
FLW IT

 Ghent University
 @ugent
 Ghent University

E lien.vanmarsnille@ugent.be
 helpdesk.flw@ugent.be

www.ugent.be