

# Libraries and Open Science: The Utrecht Example

**ADBU Workshop** 

Paris, 21 November 2017

**Anja Smit** University Librarian

What does the library do for you?



### You

- · Gather information
- Assess information
- Study
- Meet peers
- Exchange ideas

### The library

- Offers study space
- Trains information literacy skills
- Provides online and offline collaboration environmments
- Organises metadata
- Offers an accessible library collection
- Helps you find information

### You

- Publish
- Teach
- Archive
- Disseminate

### The library

- Provides educational support
- Gives advice about impact, Open Access and legal questions
- Provides archiving facilities



### You

- Generate data
- Analyse data
- Write

### The library

- Provides data management support
- Offers data storage advice





### The Academic Affairs' Office

The Academic Affairs' Office advises the Executive Board and the faculties on the development and implementation of strategic policies aimed at teaching, research and student affairs. Academic Affairs furthers the University's ambition to

Faculty of Science

Research

Education

Collaboration

strengthen its international rep Faculty of Science

create the preconditions for stu enjoy an active student life with responsible for guidance of stud psychologists) and for informat

Director: dr. E.I. (Esther) Stieke Administration Building Room 1.74-1.80 (secretariat)

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The Research Support Office (RSO) of the Faculty of Science supports researchers in finding external funding for their research. There are many sources to fund research, each with their own goals and requirements, and many funding schemes are highly competitive. The RSO has extensive experience with the different funding schemes and can offer specialized support for researchers to maximize their chances of success.

### University Library



### University Library

Searching for literature

### Managing data & literature

- > Storing and organising
- > Analysing and writing
- Archiving and sharing
- > Data management
- Help

Publishing

Practical information

Locations

Collections

About the library

## Data management

"We help you with questions about managing, describing, and making available research data."

Check Research Data Management for all information.

### WE KNOW ALL ABOUT:

- finding existing datasets
- · workshops on Data Management Plan (DMP) and Open Data
- specific questions regarding data management (plans) or open data before, during or after your research

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# The Netherlands: paving the way for open access





- 100% full open access to publications in 2020
- Make research data optimally suited for reuse
- Develop recognition and rewards systems
- Promote and support open science

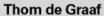


**Karl Dittrich** 



José van Dijck









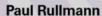








Tjibbe Joustra



Pancras Hogendoorn

**Richard Janssen** 











This declaration is also herewith signed by the following parties: DANS, The Young Academy, DTL, LCRDM, Netherlands eScience Center, 4TU.Centre for Research Data, and UKB

## THE POWER OF SYNERGY

**AMBITIONS 2017-2020** 

UKB, the consortium of university libraries and the National Library of the Netherlands, supports and accelerates scholarly and scientific advances by sharing, concentrating and bringing together expertise in national and international networks.













Wereniging Hogescholen

vsnu



















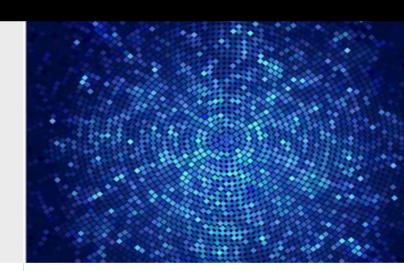




Your partner in research data curation

**ABOUT RDNL** ▶ **NEWS AND AGENDA** ▶ **PARTNERS** ▶ **SERVICES** ▶

**Research Data Netherlands** is an alliance between 4TU.Centre for Research Data, Data Archiving and Networked Services (DANS) and SURFsara. With this coalition, which is also open to other parties, the three data archives join forces in the area of long-term data archiving.













## A national strategy for research data management

Facilities and data infrastructure

Legal aspects and ownership

Financial aspects

Researcher support and advice

Awareness / Engagement

ownership

Finance

Research support and

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the Netherlands? How can we store all this data so that it remains accessible for reuse, also in the long term? How do we safeguard scientific integrity?

The National Coordination Form Research Data Management facilitates a national strategy for research data management. The focus is on five core issues.



## ResearchIT

## Goals:

- Develop infrastructure
- Provide tooling to handle data
- Develop Research Data Management Support

















### Research Data Management

## ResearchIT





### Prepare

Before starting to collect data for your research, it is essential to plan and prepare.

### Handle

Your data is valuable! Here are some tools and tips for protecting, storing and analysing

### Preserve and Share

Research data needs to be able to be shared and verified for many years. Read how to ensure that yours will be.

READ MORE

READ MORE

READ MORE





## **Tools for Research Data Management**

SOLUTIONS TO MAKE RESEARCH DATA MANAGEMENT (RDM) EASIER FOR UTRECHT UNIVERSITY ACADEMICS.

### **FUNDING**

- . Research Funding Toolkit
- . Data Management Cost Guide

### IT SOLUTIONS

**RDM SUPPORT** . Info.rdm@uu.nl www.uu.nl/rdm

- Data Storage Solutions
- . Data Publishing Solutions
- . High Performance Computing

**UU POLICY FRAMEWORK** . Policy Framework for Research Data

> Data Ethics Decision Aid (DEDA) . Do's and Don'ts Informed Consent for Sharing Data

. Information Security Policy

**ETHICS** 



### PLANNING

. Checklist for Data Management Plan (DMP)



### **PRIVACY & INFORMATION SECURITY**

- . Data Classification for Secure Research
- Privacy Checklist
- · Privacy impact Assessment



- . Guide to Rules and Regulations (in Dutch)
- . Guide to Legal Documents for RDM









## AN OVERVIEW OF ONLINE AVAILABLE TOOLKITS, GUIDES, CHECKLISTS AND

- DMP Requirements Funding Organisations









Utrecht University

AN OVERVIEW OF ONLINE AVAILABLE TO

UTRECHT UNIVERSITY ACADEMICS.

















Newsletter Focus Area Utrecht Platform for Applied Data Science



### News from Research IT

### In need of tools to help you with Research Data Management?



RDM Support created an overview of online available toolkits, guides, checklists and solutions to make your Research Data Management (RDM) easier. There are direct links in the overview to take you to the specific tool(kit), guide or

prevent abuse of your online identity. Visit uu.nl/work-safely for more information

November 21, 8 PM Lecture by data scientist Cathy O'Neil on her book Weans

checklist.

RDM Support provides all kinds d assistance to researchers of Utree research. This can range from one scale infrastructure coordination.

| Share:



## **Education**

R Data Café on Hypothesis testing with R (November 13)



R Data Café is an informal meetup for researchers working with the R-programming language. During the meeting, you can work on your R code, ask questions and learn from others.

### More news

**Big Data Alliance Member** 

### Datamanagement IT services

Ton Smeele

Datamanagement IT services Information and Technology Services <a href="mailto:info.rdm@uu.nl">info.rdm@uu.nl</a>



High Performance Computing (HPC)



Kees van Eijden
ICT developer
Information and Technology Services
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### Research Data Storage

### Martin Schuckman

Research Data Storage Information and Technology Services info.rdm@uu.nl



### Information Security



René Ritzen
Corporate information Security Officer
Information and Technology Services
Can also be contacted via ciso@uu.nl

### Datamanagement plan and workshops



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### Metadata (standards) and interoperability

### Otto Lange

Metadata specialist Utrecht University Library info.rdm@uu.nl



### Overall Research Data Management Support



Annemiek van der Kuil
Project manager RDM Support and
consultant
Utrecht University Library
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### online RDM training

### **DMPonline**

### **RDM** website



- Data collection
- Data documentation Handle
- Data storage
- Data security
   Preserve and share
- Data selection and preservation
- Data availability for reuse

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GUIDANCE

**REVIEW** 

Connect with
Research Funding
and Graduate
Schools

Machine actionable

UU PURE

**FUNDER** 

NL coop Integrate RDM, info security, privacy, ethics, research funding

### 25 COUNTRIES



Several PetaBytes of solid Earth Science data will be available

**Several thousands** of **users** expected to access the infrastructure



## 101 INNOVATIONS IN SCHOLARLY COMMUNICATION





Utrecht University Library

THE CHANGING RESEARCH WORKFLOW We intend to address the questions of what drives innovation and how these innovations change research workflows and may contribute to more Jeroen Bosman 💆@jeroenbosman Science is in transition. This poster gives an impression of the exploratory open, efficient and good science. phase of a project aiming to chart innovation in scholarly information and

### communication flows from evolutionary and network perspectives. 101 Innovative tools and sites in 6 research workflow phases (< 2000 - 2015)



## Most important developments in 6 research workflow phases

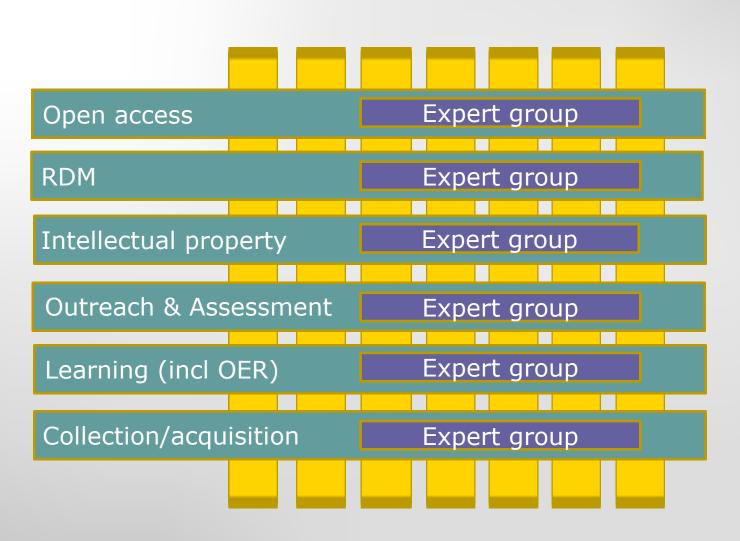
Most important developments III o leading Outreach						Assessment
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	Discovery	Analysis detainen k preedserred science	collaborative constru-	publication publication	use of alterestrics for reconstoring outcoach	more open and post- publication peer reviews
Trends	social discovery tools	more seline analysis tools	more integration with publication & essentment tools	First, Judge Laner	or a insurants of Funders	who popular costly qualitative assessment)
Expectations	QUEST GENERALLY	annesses to share in	acceptance of collaborative online writing	effect of journal/publisher status.	A institutions	using partners, sublications and
Uncertainties	support for full-text exacts and text relating	analysis proson	severals ragging white writing/ching	render-side paper formatries	INSTRUMENT VALUE OF	and organized
Opportunities	discovery based on aggregated CA fail test		salesylphysoy of order	globalisation of publishing/access standards	Smithand generation.	Reiz
Challenges	seal servicetic search (converses, & selections	reproductivity	Astack	2.6	repressa better conserva-	stand comportance of society reference is rece-
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term development	NAME AND POST OF THE PARTY OF T		publishing			

## Typical workflow examples





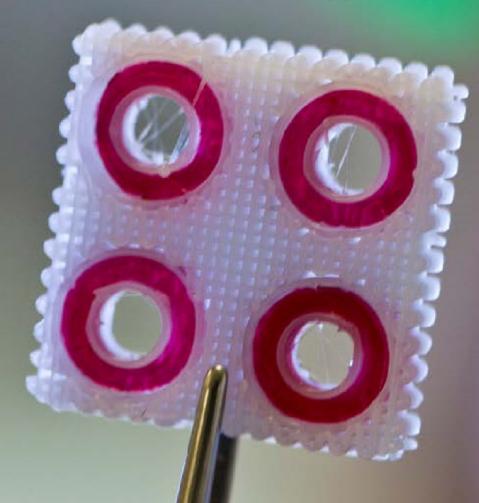
Subject



Faculties



# Impact of research and innovation





# Impact of research and innovation

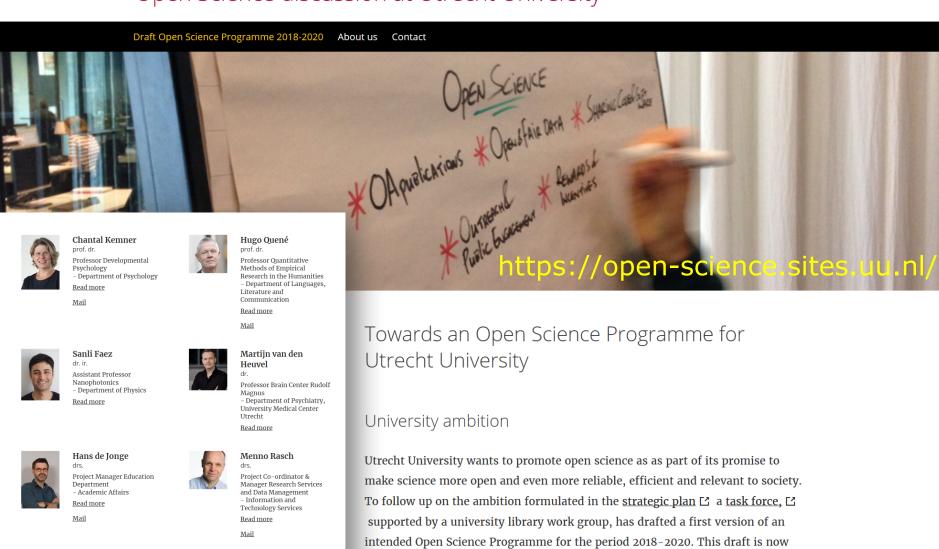
Utrecht University aims to operate at the forefront of Open Science



Anja Smit drs. University Librarian - Utrecht University Library

Mail

### Open Science discussion at Utrecht University



open for consultation.

You are invited to discuss and comment



## Merci pour votre attention!

**Anja Smit** University Librarian