

UNIVERSITY OF BERGEN LIBRARY

# Data Management Planning at UiB

University of Bergen Library

Jenny Ostrop

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15.06.2021

UNIVERSITY OF BERGEN





## Employee Pages

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### OPEN SCIENCE

# The University of Bergen Policy for Open Science

Openness, transparency, and knowledge exchange are core values for the University of Bergen. Technological changes and increased digitalization have created new opportunities for research, education, innovation, and artistic research.

*Adopted by the University Board on September 24, 2020*



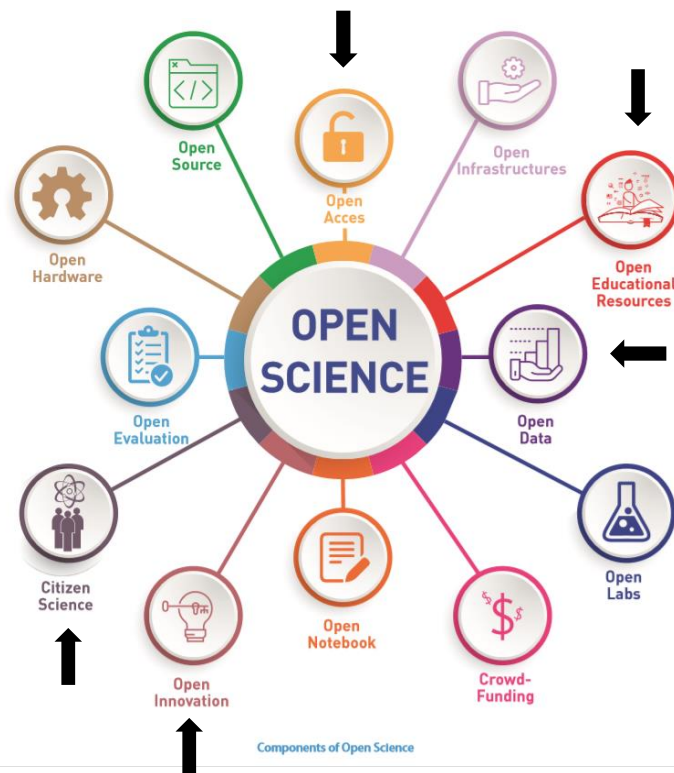
# UiB's policy for Open Science

*“Both the EU and the Research Council of Norway have policies for open science and the Norwegian government has established guidelines for open access to research data and research articles which are preconditions for activities at UiB.”*



# UiB's policy for Open Science

- Open access to research publications and artistic research
- **Open access to research data**
- Open Innovation
- Citizen Science
- Open educational resources



Source: [https://en.unesco.org/sites/default/files/open\\_science\\_brochure\\_en.pdf](https://en.unesco.org/sites/default/files/open_science_brochure_en.pdf)

# UiB's policy for Open Science

“The goal of the University of Bergen is that data resulting from research activity should be made readily available for reuse in accordance with FAIR-principles”



# UiB's policy for Open Science

UiB has established the following principles for open access to research data:

(...)

- Researchers and students at UiB will have access to relevant training and guidance in research data management.
- All research projects lead by researchers at UiB will have a data management plan.

(...)



# University Library Research Data Team



**Kjersti H. Enerstvedt (PhD)**

Senior Academic Librarian  
Subject specialist for Earth  
Sciences and Technology  
[Kjersti.Enerstvedt@uib.no](mailto:Kjersti.Enerstvedt@uib.no)



**Jenny Ostrop (PhD)**

Senior Academic Librarian  
Subject specialist for mathematics  
and computer science  
[Jenny.Ostrop@uib.no](mailto:Jenny.Ostrop@uib.no)

## Courses and guidance:

- Open Science
- Open Data: why, how and where?
- Data Management Plan
- [UiB Open Research Data](#)

## More information on our web pages:

[Open Access to Research data](#)

[Data Management Plans](#)

**Contact us:** [research-data@uib.no](mailto:research-data@uib.no)



## University of Bergen Library

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Using the Library ▾

Research and publish ▾

Open Science ▾

About the Library ▾

UIB &gt; University of Bergen Library &gt; Open Science &gt;

  
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SEARCH IN Oria

## RESEARCH DATA

## Open Access to Research Data

The University Library offers guidance on various aspects of research data handling and data management planning.

Research data is a core part of the value creation at universities. Promoting open access to research data is a strategy to make full use of their potential and thereby maximise the impact of research activities in a digital society.

The University Library provides guidance on various aspects of research data handling and data management planning, please do not hesitate to [contact us](#).

**WHY should you make your research data open?**

Open Access to research data increases the impact and transparency of research activities. It ensures that the full potential of a research project is utilized and can lay basis for further research, with appropriate crediting of the data creators. Therefore, practices to support good data handling and open access to research data have been made a requirement by funding bodies, such as the [Norwegian Research Council](#) and [Horizon2020/Horizon Europe](#). In alignment with the [National strategy on access and sharing of research data](#), open access to research data is part of [The University of Bergen Policy for Open Science](#). Furthermore, many publishers require authors to make the datasets underlying the findings described in their publications available and thereby ensure reproducible research.

*"More open access to, and wider reuse of, research data promotes scientific advancement in that*

## CONTACT

Contact us at [research-data@uib.no](mailto:research-data@uib.no)

## OPEN ACCESS TO RESEARCH DATA

*"The goal of the University of Bergen is that data resulting from research activity should be made readily available for reuse in accordance with FAIR-principles."*  
From [University of Bergen Policy for Open Science](#)

## UIB'S INSTITUTIONAL RESEARCH DATA ARCHIVE







## University of Bergen Library

[Your subject](#)[Using the Library](#)[Research and publish](#)[Open Science](#)[About the Library](#)[UiB](#) > [University of Bergen Library](#) > [Research and publish](#)  
[Go to Oria](#) [Databases](#) [Help](#)

SEARCH IN ORIA

## DATA MANAGEMENT

## Data Management Plans

A data management plan or DMP is a formal document that outlines how data are to be collected and handled both during a research project, and after the project is completed

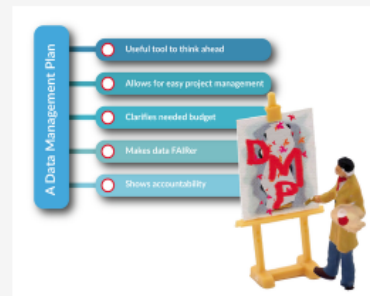


Photo: CESSDA ERIC

WHY do you have to write a Data Management Plan?

## CONTACT

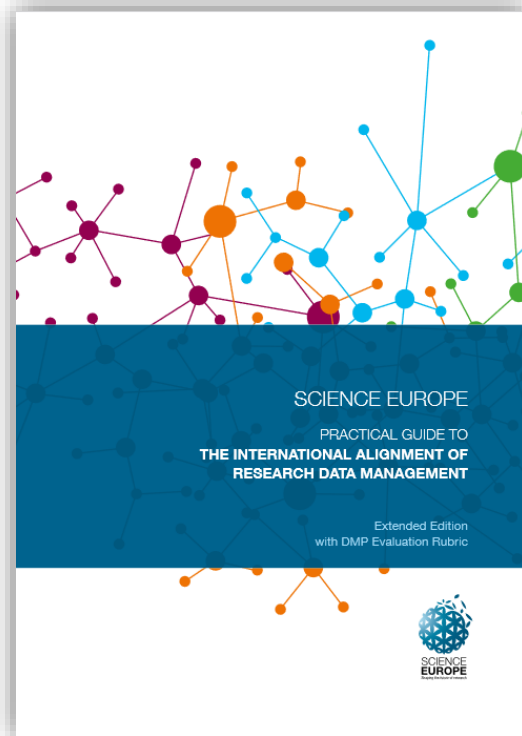
Contact us at: [research-data@uib.no](mailto:research-data@uib.no)

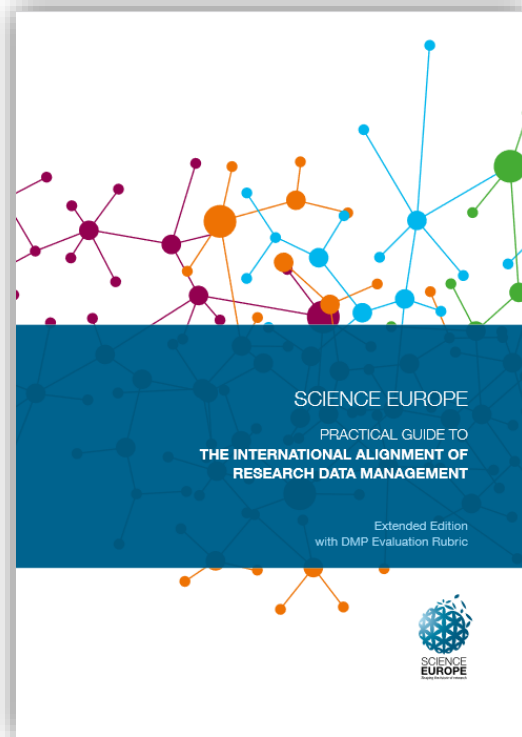
## COURSES

We offer open courses in Data Management every semester. If you want a course tailored for your department or research group, please contact us.

## Upcoming courses:

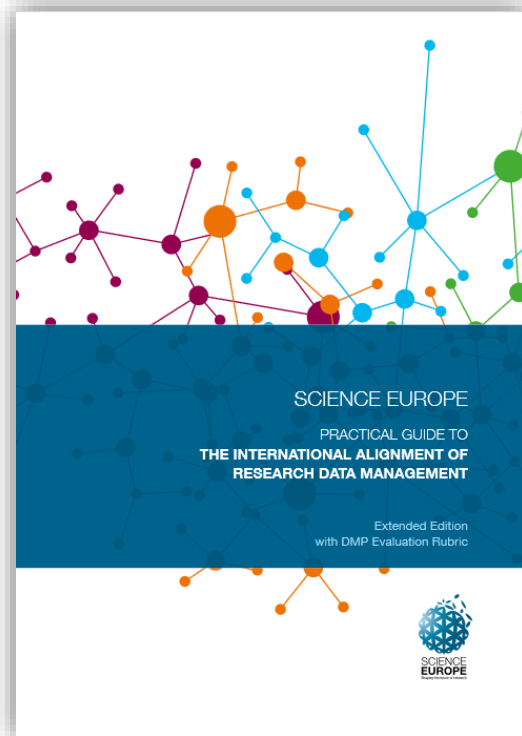
[Introduction to DMP](#) (in Norwegian)  
(16.04.2021)[DMP for life science projects](#)  
(21-22.04.2021)[DMP workshop](#) (07.05.2021)





Resources at





# Storage of data & metadata

- Storage of data & metadata: use managed storage with automatic backup
- NOT: laptops, stand-alone hard drives, USB sticks etc.



# File storage at UiB IT

## File storage and backup

All employees and students at the University of Bergen have a personal directory at the UiB file servers. This is the "home directory" where you should store personal files associated with work or studies at UiB. The IT department provides backup and access control to keep your files safe.

### Contents [hide]

- 1 Safe in the home directory
- 2 Synchronizing laptop and home directory
- 3 Shared directories
- 4 Need more storage space?
- 5 Access outside UiB
- 6 Backup
- 7 Restore from backup
  - 7.1 Ubuntu
- 8 Read more

- Price list active storage:  
[https://it.uib.no/Prisliste  
\\_IT\\_tjenester](https://it.uib.no/Prisliste_IT_tjenester)
- Long-term storage (cold storage):  
<https://it.uib.no/Billy>
- Contact via UiBhjelp



# Large datasets (TB range)

Sigma2 & NIRD



subject-specific platforms  
(storage based on NIRD)

## NeLS

Norwegian e-Infrastructure for Life Sciences

## INES



# Personal (sensitive) data

- How is security and protection of sensitive data taken care of?



The screenshot shows the 'Personvernportalen' (Personal Data Portal) of the University of Bergen. The header includes the university's name and navigation links for 'Utdanning', 'Forskning', 'Bibliotek', 'For studenter', 'For ansatte', and 'Om UiB'. Below the header, there are four main menu items: 'Personvernerklæring', 'Behandling av personopplysninger ved UiB', 'Personvern i forskning og utdanning', and 'Avvikshåndtering og informasjonssikkerhet'. The main content area features a large image with a padlock icon and the text 'GDPR'. To the right of the image, there is a section titled 'Behandling av personopplysninger ved UiB' which explains that the university processes personal data for administrative and research purposes, and provides a link to the 'personvernerklæringen' (privacy policy). Below this, there are three links: 'Personvernerklæring for UiB', 'Personvern i forskning ved UiB', and 'Informasjonsmøte om RETTE'. At the bottom, there is a link 'Registrer prosjektet ditt i RETTE'.





# Personal (sensitive) data

- How is security and protection of sensitive data taken care of?



UNIVERSITETET I BERGEN

Utdanning Forskning Bibliotek For studenter For ansatte Om UiB

## Personvernportalen

Personvernerklæring ▾ Behandling av personopplysninger ved UiB ▾ Personvern i forskning og utdanning ▾ Avvikshåndtering og informasjonssikkerhet ▾

UiB > Universitetsdirektørens kontor >

### Behandling av personopplysninger ved UiB

Ved UiB behandles personopplysninger for administrative formål, for arkivformål og for forskningsformål. I [personvernerklæringen](#) redegjøres for hvem som er behandlingsansvarlig, hvilke personopplysninger som behandles, formålet med behandlingen, den registrertes rettigheter og kontaklinformasjon.

[Personvernerklæring for UiB](#)

[Personvern i forskning ved UiB](#)

[Informasjonsmøte om RETTE](#)

[Registrer prosjektet ditt i RETTE](#)



UNIVERSITETET I BERGEN

Utdanning Forskning Bibliotek For studenter For ansatte Om UiB

## IT-avdelingen

Organisering ▾ Planer og dokument ▾ Resurser ▾ Kontakt ▾

UiB > IT-avdelingen >

### INFORMASJON FRA IT-AVDELINGEN

#### SAFE (sikker adgang til forskningsdata og e-infrastruktur)

På IT-avdelingen ved Universitetet i Bergen har vi utviklet en løsning for sikker behandling av sensitive personopplysninger i forskning. Løsningen kalles vi SAFE (Sikker Adgang til Forskningsdata og E-infrastruktur). SAFE bygger på Norm for informasjonssikkerhet i helse- og omsorgstjenestene (Normen) og sikrer at informasjonssikkerheten med hensyn til konfidensialitet, integritet og tilgjengelighet blir ivarettatt ved behandling av sensitive personopplysninger.

<https://www.uib.no/safe>



# Personal (sensitive) data

- How is security and protection of sensitive data taken care of?



UNIVERSITETET I BERGEN

Utdanning Forskning Bibliotek For studenter For ansatte Om UiB

## Personvernportalen

- Personvernerklæring
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- Personvern i forskning og utdanning
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UiB > Universitetsdirektørens kontor >

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[Personvernerklæring for UiB](#)

[Personvern i forskning ved UiB](#)

[Informasjonsmøte om RETTE](#)

[Registrer prosjektet ditt i RETTE](#)



UNIVERSITETET I BERGEN

Utdanning Forskning Bibliotek For studenter For ansatte Om UiB

## IT-avdelingen

- Organisering
- Planer og dokument
- Resurser
- Kontakt

UiB > IT-avdelingen >

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<https://www.uib.no/safe>



## Services for sensitive data (TSD)

### What is TSD?

- provides a platform for researchers at UiO and other public research institutions
- can collect, store and analyze sensitive research data in a secure environment
- secure project area
- integrated solution for collecting sensitive data (Nettskjema)
- access from anywhere in the world

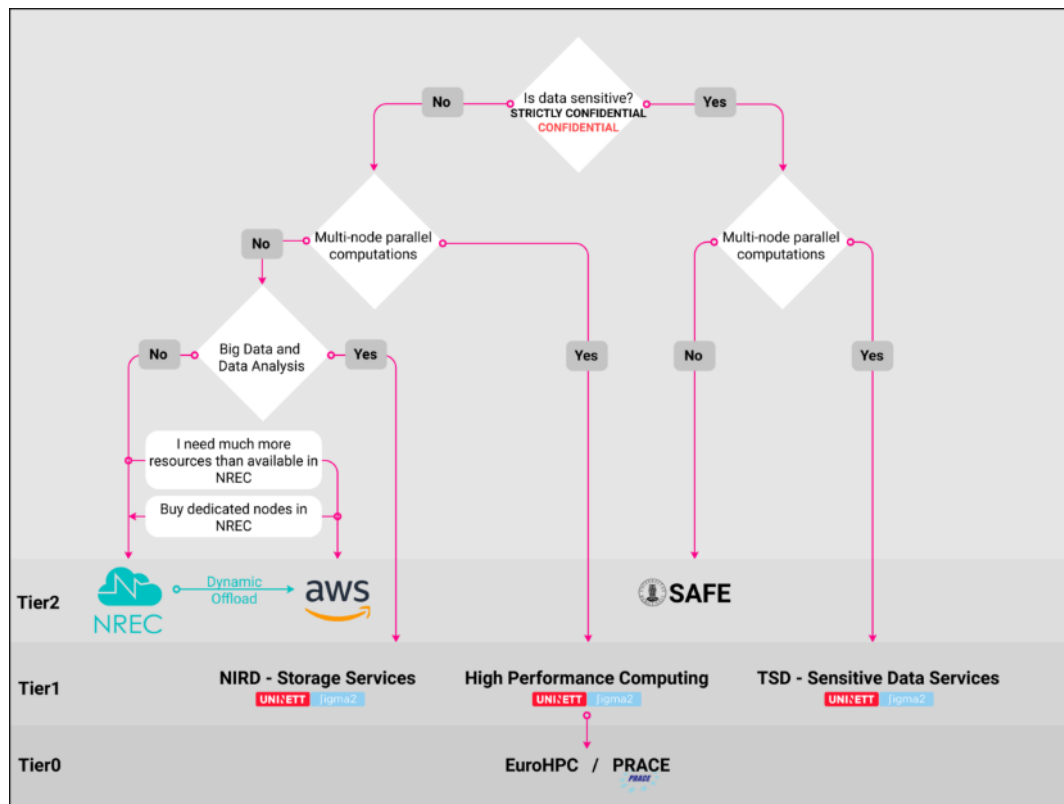


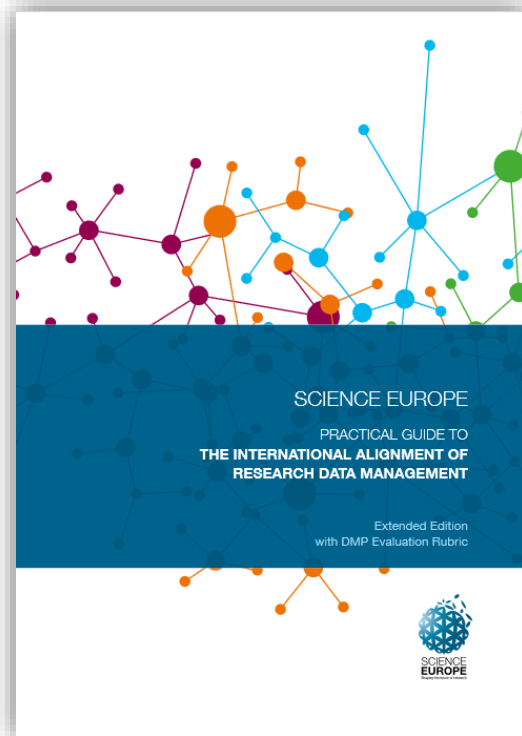
### What can be stored in TSD?

● ● ● Up to black data

<https://www.uio.no/english/services/it/research/sensitive-data/>

# High-performance computing (HPC)





# Legal and ethical requirements

- Personal/personal sensitive data?
- Intellectual property rights (IPR)?



# Personal Data and Privacy Gateway (Personvernportalen)



- UiB's data protection officer (Personvernombud):  
Janecke Veim  
[Janecke.Veim@uib.no](mailto:Janecke.Veim@uib.no)

- Helse Bergen:  
Christer Kleppe  
[personvernombudet@helse-bergen.no](mailto:personvernombudet@helse-bergen.no)

# Projects with personal (sensitive) data at UiB must be registered in RETTE

- projects with REK approval
- projects evaluated by NSD
- self-completed project information



RETTE

[Your projects](#) [User manual](#)

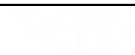
🇬🇧 English ▾ [Login](#)

## RETTE

System for Risk and compliance. Processing of personal data in research and student projects at UiB.

[Login](#)

[Can the project be registered directly in RETTE?](#)



# Intellectual Property Rights (IPR)

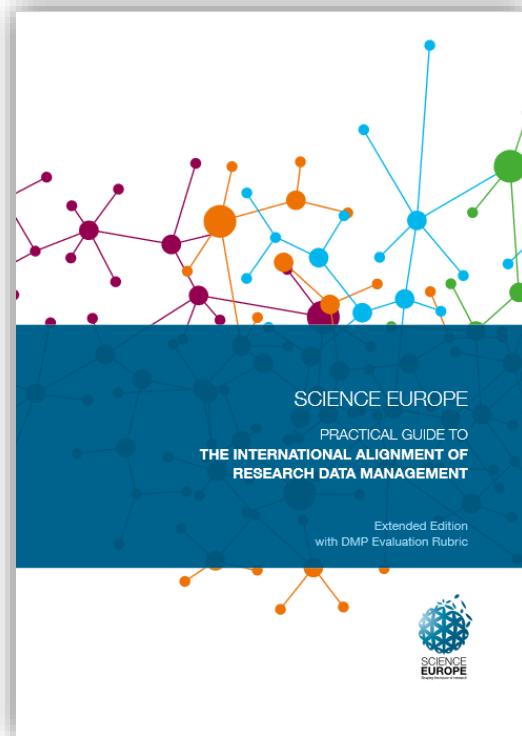
- Division of Research and Innovation  
(Forsknings- og innovasjonsavdelingen, FIA)



[UiB](#) > [Forsknings- og innovasjonsavdelingen](#) > [Organisering](#) >

## Seksjon innovasjon





# Responsibilities and resources

- Who is responsible?
- Required resources (financial/time)?



# Responsibilities

- Consider to use controlled vocabulary for role definitions
- e.g. DataCite Metadata Schema contributorType (7.1):  
Contact Person, Project Manager, Project Leader, Data Manager, Data Collector, Data Curator, Data Steward, Core Facility Staff, Research Group, Work Package Leader, Hosting Institution...



# Budgeting

- Should be part of the research application, further specified in the DMP
- Archiving data saves costs for long-term data storage
- Good data management takes time: consider personnel!

Resources:

Utrecht University – Costs of data management

UK Data Service - Costing data management



Data  
description

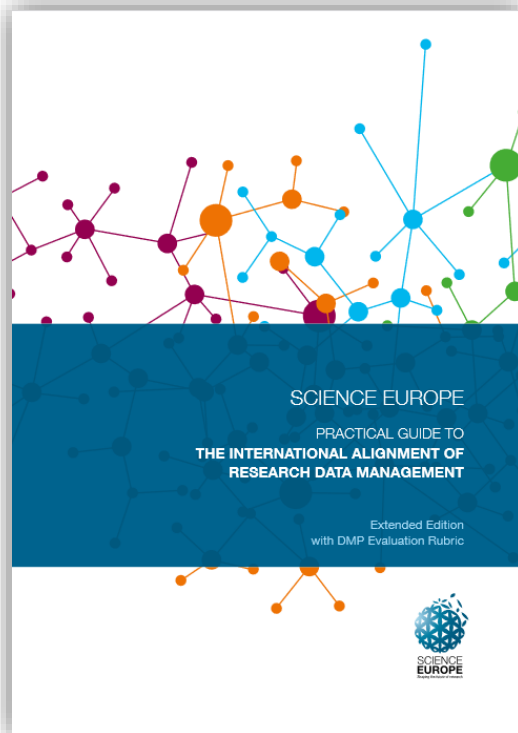
Metadata &  
data quality

Storage &  
Backup

Legal &  
ethical  
issues

Responsi-  
bilities &  
resources

Long-term  
preservation  
& sharing



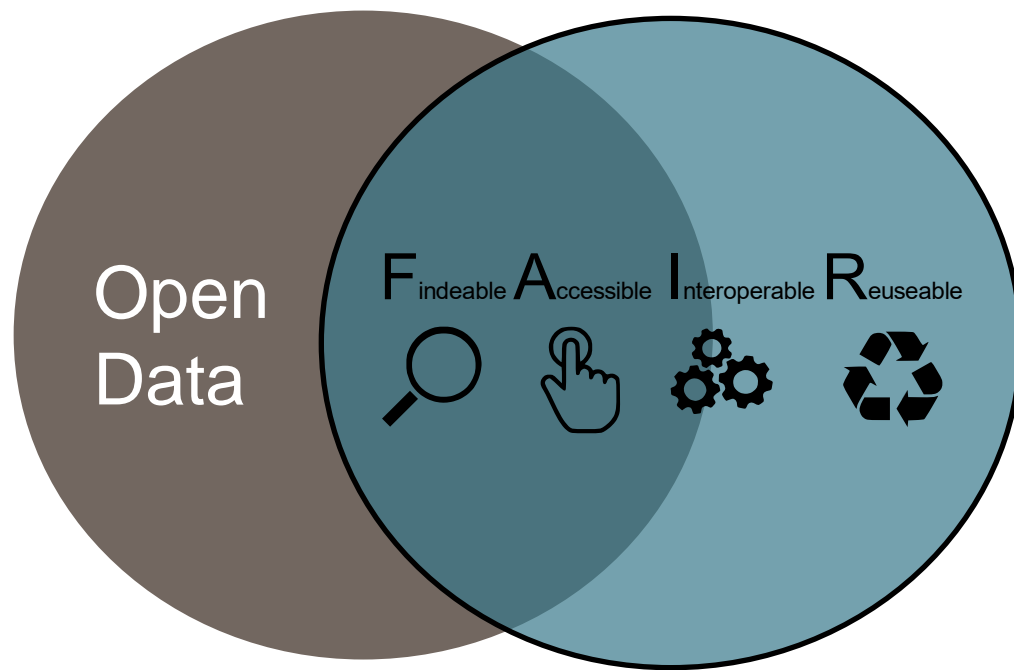
SCIENCE EUROPE

PRACTICAL GUIDE TO  
THE INTERNATIONAL ALIGNMENT OF  
RESEARCH DATA MANAGEMENT

Extended Edition  
with DMP Evaluation Rubric



# Open data and FAIR data



“As open as possible – as closed as necessary”



# Data repositories

## 1. Community repository



## 2. Institutional repository



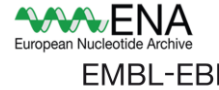
UiB Open Research Data

## 3. Multidisciplinary repository



# Data repositories

## 1. Community repository



## 2. Institutional repository



UiB Open Research Data

## 3. Multidisciplinary repository





# UiB Open Research Data



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Deposit Guide

Support

Log In



## UiB Open Research Data

[DataverseNO](#) > [UiB Open Research Data](#)

[Contact](#) [Share](#)



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☒ [Dataverses \(1\)](#)

☒ [Datasets \(86\)](#)

☐ [Files \(66,263\)](#)

### Dataverse Category

[Research Group \(1\)](#)

### Publication Year

[2020 \(67\)](#)

[2021 \(17\)](#)

[2019 \(3\)](#)

### Distributor Name

[UiB Open Research Data \(86\)](#)

### Subject

1 to 10 of 87 Results

[Sort ▾](#)

Replication Data for: The potential for cleaner fish driven evolution in the salmon louse *Lepeophtheirus salmonis*: genetic or environmental control of pigmentation?

May 19, 2021



Hamre, Lars Are; Oldham, Tina; Nilsen, Frank; Glover, Kevin, 2021, "Replication Data for: The potential for cleaner fish driven evolution in the salmon louse *Lepeophtheirus salmonis*: genetic or environmental control of pigmentation?", <https://doi.org/10.18710/8EE2JS>, DataverseNO, V1

The datasets consist of two files with data from two different experiments. Experiment 1: compares pigmentation of lice cultivated indoor and outdoors in two experiments, one in June and one in September 2008. Photos are taken using translucent light and pigmentation is measured...

Replication data for: Cystatin C proteoforms in chronic kidney disease

Apr 30, 2021



Dierkes, Jutta, 2021, "Replication data for: Cystatin C proteoforms in chronic kidney disease", <https://doi.org/10.18710/NUNHDF>, DataverseNO, V1



<https://dataverse.no/dataverse/uiib>; Sandbox: <https://test.dataverse.no/dataverse/uiib>



[research-data@uib.no](mailto:research-data@uib.no)





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