DeiC Dataverse

The Danish National Trusted Repository for Research Data

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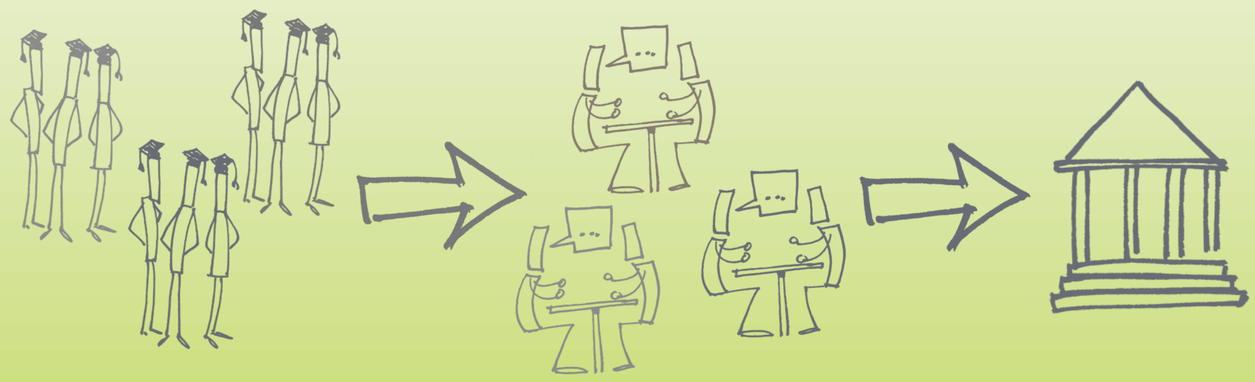
The "Research Data Lifecycle" illustrates the different elements of research data management along the course of a research project. Repositories like DeiC Dataverse facilitate the sharing, archiving and reuse of research data.

What is DeiC Dataverse?

DeiC Dataverse is a platform for researchers in Denmark to publish and archive their research data and thereby make them available for reuse by others.

It is offered through DeiC and operated jointly by the University of Copenhagen (IT) and Copenhagen University Library (Service Management).

User support is provided by each university through local "DeiC Dataverse Front Offices".



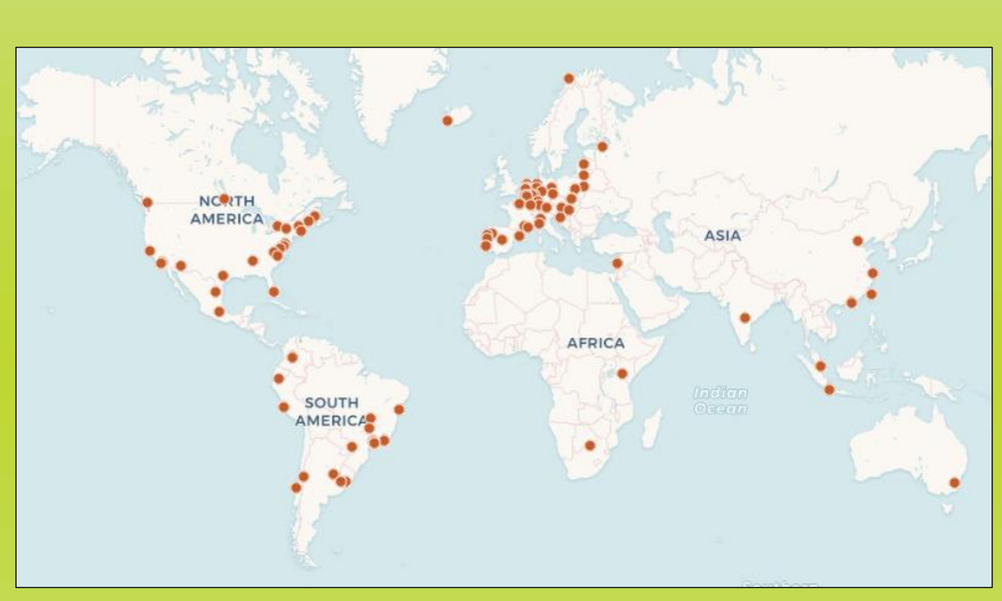
Each university offers support and guidance for their own users through local "DeiC Dataverse Front Offices". These refer to the "DeiC Dataverse Back Office", which in turn provides common guidelines and training for the local administrators and curators. The Back Office also coordinates the daily operation as well as the future development of the service. Illustrations by Patrick Hochstenbach (University of Gent, Belgium), The Open Science Training Handbook http://book.fosteropenscience.eu/en/

Why do we need a National Trusted Repository?

Establishing a national platform under DeiC provides a scalable, efficient and sustainable solution for all universities in Denmark.

The repository is an important brick in the research infrastructure landscape for implementing the National Strategy for FAIR Data Management.

DeiC Dataverse will help to foster transparency and credibility in Danish research and make valuable research outputs visible to the world.



Currently, there exist more than 100 Dataverse installations worldwide, serving as institutional, national or specialized repositories and many of the providers are active members of the global Dataverse Community. Screenshot from https://dataverse.org/

https://doi.org/10.48715/ea59-tp35

https://ufm.dk/en/publications/2014/

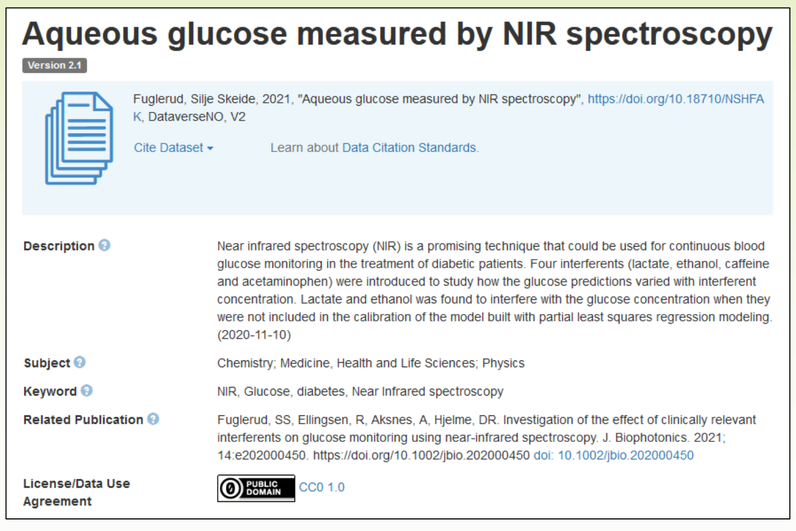
How does DeiC Dataverse help to make research data FAIR?

Datasets are registered with structured metadata that can be searched and browsed.

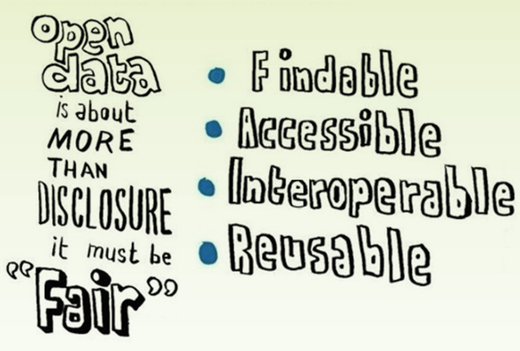
Datasets are assigned DOI's as persistent identifiers for sharing, citing and referencing.

Datasets are published with clear terms and conditions for reuse.

Files are available for direct download and through an API. If access is restricted, the terms and procedures for access are clearly described.



Example for a published dataset with structured metadata, DOI and reuse license, from DataverseNO, https://doi.org/10.18710/NSHFAK



Trusted repositories serve as easy-to-use tools for sharing research data along with corresponding metadata and documentation on the internet. This is a final step in FAIR research data management.
http://doi.org/10.1038/sdata.2016.18

Why do we choose Dataverse as repository?

Dataverse is open source and freely available from GitHub, which ensures independence from (future) commercial interests.

A large, international community secures active development of the code as well as broad sharing of knowledge and experience.

The application itself can be easily customized, adapted and extended.

Dataverse and the FAIR Principles

F1 (meta)data are assigned a globally unique and persistent identifier
F2 data are described with rich metadata
F3 metadata clearly and explicitly include the identifier of the data it describes
F4 (meta)data are registered or indexed in a searchable resource
A1 (meta)data are retrievable by their identifier using a standardized communications protocol
A1.1 the protocol is open, free and universally implementable
A1.2 the protocol allows for an authentication and authorization procedure, where necessary
A2 metadata are accessible, even when the data are no longer available
I1 (meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation
I2 (meta)data use vocabularies that follow FAIR principles
I3 (meta)data include qualified references to other (meta)data
R1 (meta)data are richly described with a plurality of accurate and relevant attributes
R1.1 (meta)data are released with a clear and accessible data usage license
R1.2 (meta)data are associated with detailed provenance
R1.3 (meta)data meet domain-relevant community standards

Dataverse as repository enables findability and accessibility of research data, whereas the degree of interoperability and reusability to a larger degree depends on the users. Adapted from Mercè Crosas "The FAIR Guiding Principles: Implementation in Dataverse" (2020), https://doi.org/10.7557/scs.2020.2

The Dataverse® Project

DeiC

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