



ROSKILDE UNIVERSITY

RE:ERUA - OPEN SCIENCE MEET-UP
SACHA ZURCHER – SPECIAL ADVISOR
APRIL 2023

WHERE ARE WE LOCATED



RUC, Just outside
Roskilde, 30 km from
Copenhagen

Copenhagen

RUC

<http://www.ciker.com/cliparts/n/g/s/R/8/e/danmarks-kort.svg>

ABOUT US

- Founded in 1972
- 7,500 students and 950 employees (FTE)
- 819 million DKK in annual turnover
- PPL – Problem-oriented Project-based Learning
- Interdisciplinary approach

Read more at <https://ruc.dk/en>



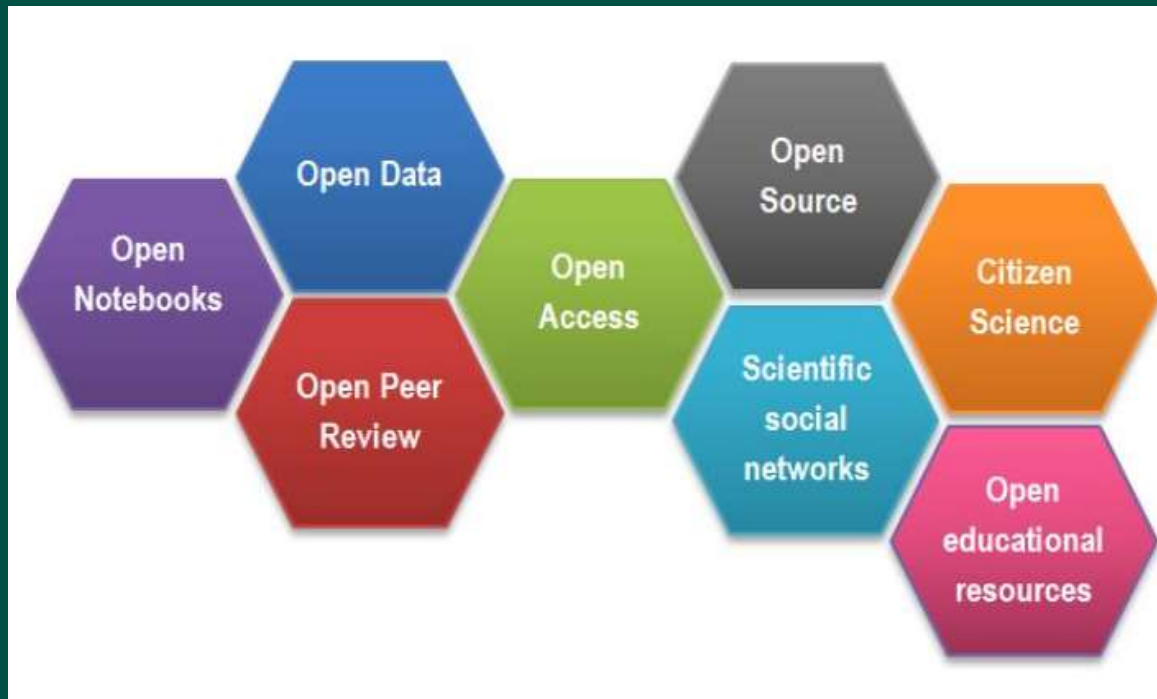
OPEN SCIENCE - DEFINITIONS

- **OECD** (2015): Open science refers to **efforts** to make the **output of publicly funded research more widely accessible** in digital format to the scientific community, the business sector, or society more generally.
- **FOSTER** (2018): Open Science is a **movement** which aims to make **scientific research, data and dissemination accessible to all levels of an inquiring society**.
- **EC** (Strategy 2020-2024): Open Science is an **approach** to the scientific process that focuses on **spreading knowledge as soon as it is available** using digital and collaborative technology.
- **UNESCO** (2021): Open Science is defined as an **inclusive construct** that combines **various movements and practices aiming to make multilingual scientific knowledge openly available, accessible and reusable for everyone**. It comprises all scientific disciplines and aspects of scholarly practices.

OPEN SCIENCE - CHARACTERISTICS

- Applies to all disciplines
- Implies public open access to scientific information
 - ✓ For other researchers as well as corporate and private users
 - ✓ Free of charge
- Includes principles and practices
 - ✓ Transparency, reuse, participation, cooperation, accountability and reproducibility for research
 - ✓ Data sharing, open notebooks, transparency in research evaluation, open source code, software and infrastructure, citizen science and open educational resources

OPEN SCIENCE FACETS



Source: <https://www.fosteropenscience.eu/learning/open-science-at-the-core-of-libraries/#/id/5a01e2d1c2af651d1e3b1b3c>

EC eight pillars of Open Science

Open Data / FAIR

European Open Science Cloud (EOSC)

New Generation Metrics

Future of scholarly communication

Rewards

Research integrity

Education and skills

Citizen science

Source: https://research-and-innovation.ec.europa.eu/system/files/2019-12/ec_rtd_factsheet-open-science_2019.pdf

OPEN SCIENCE AT UNIVERSITIES IN DENMARK

- **All** Danish universities focus on:
Open Access to publications and **FAIR data** / RDM
- Other Open Science facets more diverse at Danish universities



Citizen Science



Citizen Science

IT UNIVERSITY OF CPH

Open Access only



Citizen Science
New generation metrics



Citizen Science
New generation metrics
Open Educational Resources
Research integrity



TEACHING OPEN SCIENCE AT UNIVERSITIES IN DK

FAIR data/RDM (can be as part of RCR/GDPR course)



ECTS point given

Target group Ph.d. students



Mandatory



Mandatory



And scientific staff



Mandatory

IT UNIVERSITY OF CPH

Open Access only

Scientific staff - mandatory

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Open Access only



TEACHING FAIR DATA AT RUC

- **Course:** Research data management and the FAIR principles in Open Science
- **Mandatory:** Ph.d. students
- **When:** each semester
- **ECTS:** 0,5
- **Cooperation:** RUC Unit for Academic Development (UAD) and RUC Library / The Royal Danish Library
- **Duration:** 9:00-13:30 including lunch
- **Form:** presentations, group work, exercises

- **Link:** <https://events.ruc.dk/eae-research-data-management-20-apr-2023>

TEACHING FAIR DATA AT RUC

Learning objectives



Assess the challenges in managing your research data (RDM)



Plan your research project in regards to research data (DMP)



Increase the visibility of your research data (FAIR)

Place the FAIR principles within the broader Open Science agenda

TEACHING FAIR DATA AT RUC

Challenges

✓ SSH and STEM

- Quantitative vs. qualitative research data
- DMPs in research data life cycle
- 'A' in FAIR – GDPR
- Misuse of research data (e.g. dual-use)

✓ Incentives

- Career possibilities
- Merits / metrics (e.g. citations)
- Demand from funders/ journals

THANK YOU – QUESTIONS?

RESOURCES AND LINKS

- **DeiC (2021):** National strategy for data management based on the FAIR principles
<https://doi.org/10.48715/ea59-tp35>
- **Denmark's National Strategy for Open Access (2018):** <https://ufm.dk/en/research-and-innovation/cooperation-between-research-and-innovation/open-access/Publications/denmarks-national-strategy-for-open-access/denmarks-national-strategy-for-open-access>
- **EC (Strategy 2020-2024):** https://research-and-innovation.ec.europa.eu/strategy/strategy-2020-2024/our-digital-future/open-science_en
- **FOSTER (2018):** <https://www.fosteropenscience.eu/taxonomy/term/7>
- **OECD (2015):** <https://doi.org/10.1787/5jrs2f963zs1-en>
- **UNESCO (2021):** <https://unesdoc.unesco.org/ark:/48223/pf0000378841>