NFDI4 BIOIMAGE

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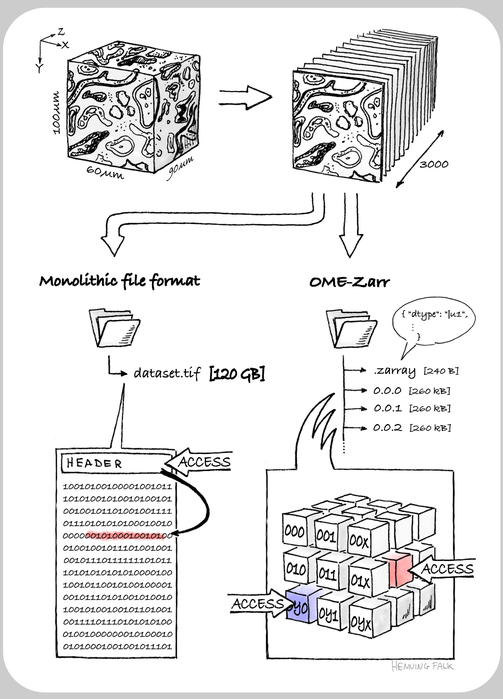
Increasing the FAIRness of electron microscopy data in life and material science research

PROJECT PLANNING | SAMPLE PREPARATION | IMAGING | DATA PROCESSING | COLLABORATIVE DATA EXPLORATION | BIOIMAGE DATA ANALYSIS | DATA SHARING and REUSE

Use **open standardized file formats** with **extensive metadata**

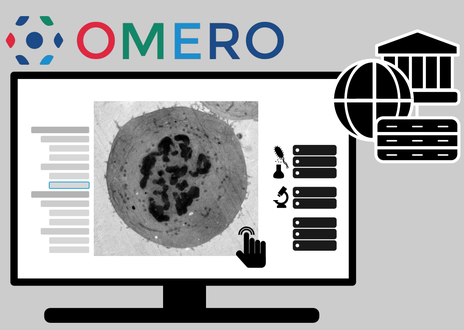
NEXT GENERATION FILE FORMATS



Use tools for **EASY and COLLABORATIVE ACCESS, ANNOTATION and VISUALIZATION** of your data

BIOIMAGE MANAGEMENT PLATFORMS

dataset from publicly available data collected at *Trends in Microscopy 2025*



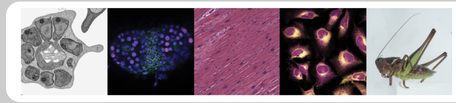
benefits for you
- shared access to data in research teams
- enhanced collaboration

benefits for all
- increased scientific output

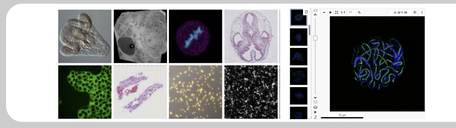
SHARE your **DATA** with the world, not just summaries of it!

PUBLIC DISCIPLINE-SPECIFIC ARCHIVES for ANNOTATED BIOIMAGE DATA

BioImage Archive — database for bioimage datasets including visualization of data in next-generation file formats



IDR Image Data Resource — OMERO-based bioimage data archive including multimodal experiments with extensive metadata



benefits for you
- increase of visibility and worship of your work

benefits for all
- increase of (interdisciplinary) scientific output
- economization of resources by reuse and reduced redundancy
- increase of availability of bioimage data

THE OBJECTIVES OF NFDI4BIOIMAGE

Capacitate researchers for FAIR image data management

Champion the **standardization** of the 'bioimage data' type

Maximize the reach of **reproducible** image analysis workflows in the community

Provide scalable **infrastructure** for FAIR image data

THE DATA STEWARDSHIP TEAM

COMMUNITY SUPPORT

- we provide **support** on bioimage data handling such as
  metadata annotations
  data upload to **community repositories**
  bioimage **data management (tools)**
  linkage to further experimental data
- we develop **tools and workflows** for the community
- we offer support via a **helpdesk**
- we collaborate via **community-use-cases**
- we connect to **experts** in the field
- we will share **training materials** and offer trainings

reach us with questions and feedback via
helpdesk@nfdi4bioimage.de or forum.image.sc

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'Monolithic-vs-chunked' by Henning Falk, ©2022 NumFOCUS, https://zenodo.org/records/7037679.

NFDI4BIOIMAGE - National Research Data Infrastructure for Microscopy and Bioimage Analysis by Moore et al., 2024, https://zenodo.org/records/13168693, modified.

DFG Deutsche Forschungsgemeinschaft

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