

Session 3: Data Management: User experience & Research IT infrastructure

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Abstract

Introduction (5 min) - Marjolijn Mertz

In this session, we look into the challenges associated with implementing FAIR (Findable, Accessible, Interoperable, and Re-usable) principles in the context of bioimaging data life cycle. We focus on two critical aspects: supporting users to make their imaging data FAIR, and establish an effective collaboration with IT departments.

3a. FAIR data processing & analysis - Presentations (4x10 mins +2 mins questions) - Chair: Marjolijn Mertz

The establishment of suitable infrastructure coupled with the integration of user-friendly open-source software tools is highlighted to facilitate streamlined metadata addition. Additionally, we showcase ongoing community efforts in defining metadata standards and interfaces, fostering data interoperability and reducing barriers in daily data management.

Automated Data Annotation efforts at UMass and Canada Biolmaging National OMERO Image Data Resource - Judith Lacoste - Canada Biolmaging and Biolmaging North America, MIA Cellavie, Montreal, Canada

Integration of Image Analysis in OMERO - Thomas Zobel - Imaging Network, University of Muenster, Germany

Update on progress towards integration of OMERO with iRODS at France Biolmaging - Guillaume Gay - BioCampus and LIRMM, University of Montpellier, France

YODA: a national initiative to share all YOur DATA in a user-friendly manner - Ander Astudillo - SURF, The Netherlands

3b. Research IT infrastructure - (20 mins) Round Table discussion

Engaging with IT departments poses recurring challenges in research data management, particularly due to varying infrastructure requirements of core facilities in institutions. Through a round table discussion, we will exchange ideas and insights on infrastructure, identifying essential components, and diverse needs within microscopy facilities. Emphasis is placed on optimizing data transport, storage, image analysis infrastructure and data sharing. Successful approaches to aligning researchers' needs with IT capabilities are explored, along with strategies to overcome barriers and improve communication.

Marjolijn Mertz & Nadia Halidi: Examples from Netherlands Cancer Institute (NKI) & Centre for Genomic Regulation (CRG) new connections with Scientific IT, EU-Life workgroup

Josh Moore - Representative from Global Biolmaging Working Group on Data Management (German Biolmaging and Open Microscopy Environment, Germany)

Ander Astudillo - Advisor RDM-IT infrastructure (SURF, The Netherlands)

Olivier Biehlmaier - Build your own Omero network (Imaging Core Facility, BioZentrum, University of Basel, Switzerland)

Questions for the panel:

Q1: What was the motivation and what are the goals for the Global Biolmaging Data Management Work Group on IT relations?

Q2: What do you think would be an optimal scenario for image data management for users, imaging scientists and IT?

Q3: How do you foresee the relationship between proprietary RDM systems and the global community?

Q4: Are there any considerations concerning privacy and security in the global RDM system (e.g., how would you integrate medical / patient related data)?