

Euro-BioImaging ERIC

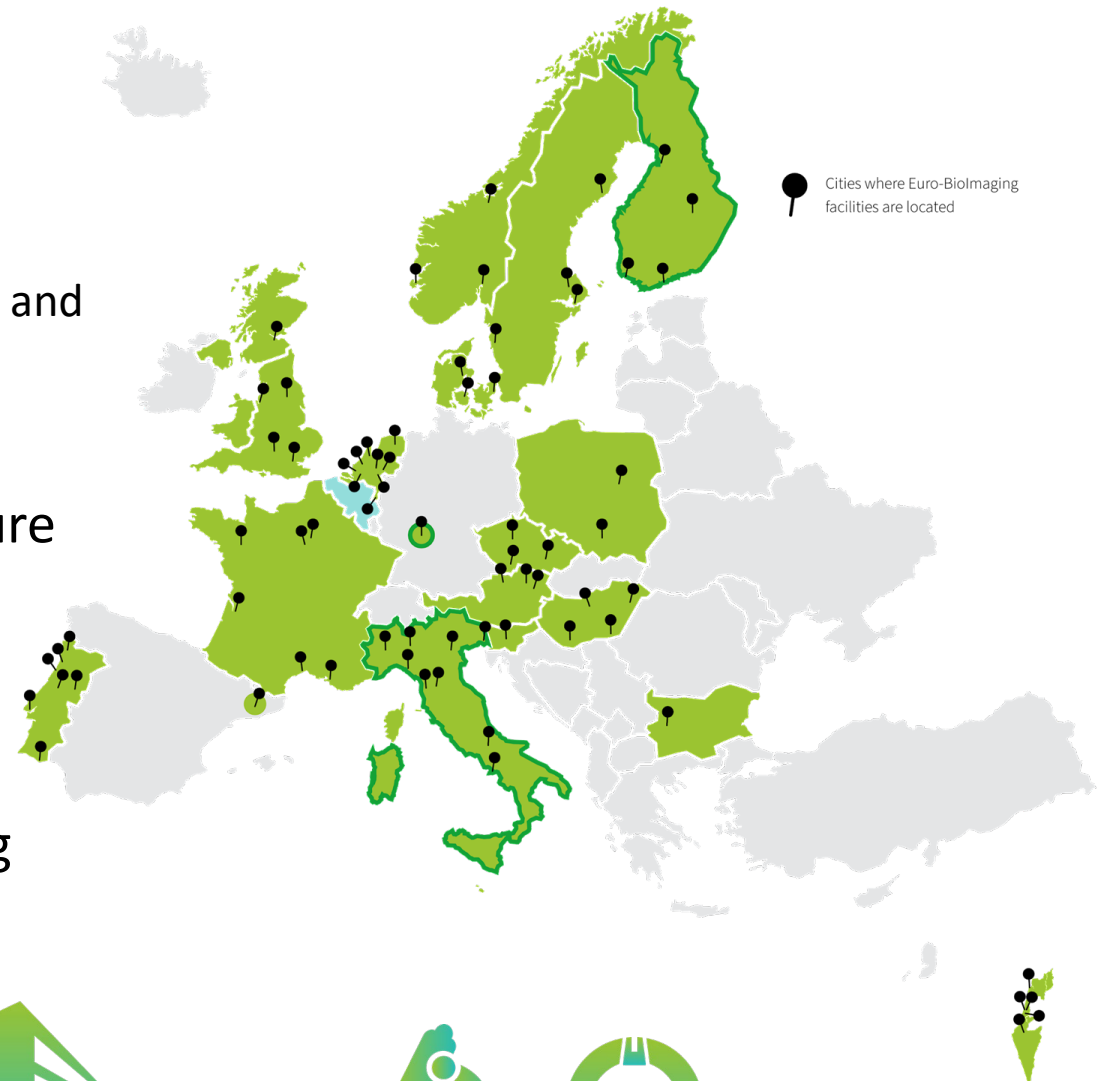
Opportunities for Researchers, Imaging
Scientists, and Core Facility Staff

Johanna Bischof, Scientific Project Manager



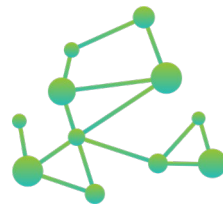
The European Research Infrastructure for Biological and Biomedical Imaging

- ✓ Euro-Biolmaging is a distributed research infrastructure with Nodes across Europe
- ✓ Publicly funded, not-for-profit
- ✓ Our Nodes are internationally recognised imaging facilities that provide open access to Euro-Biolmaging users



17

ERIC MEMBERS
(16 COUNTRIES & EMBL)



35

NODES



173

SITES



100+

TECHNOLOGIES

The Euro-BioImaging Technology Portfolio



SAMPLE CHARACTERIZATION

ELECTRON MICROSCOPY

LIGHT MICROSCOPY

ANIMAL & PLANT
IMAGING

CORRELATIVE &
MULTIMODAL IMAGING

HUMAN
IMAGING

IMAGE DATA ANALYSIS

Euro-Biolmaging Technology offer

> LIGHT MICROSCOPY ⓘ

> ELECTRON MICROSCOPY ⓘ

> MULTIMODAL CORRELATIVE MICROSCOPY ⓘ

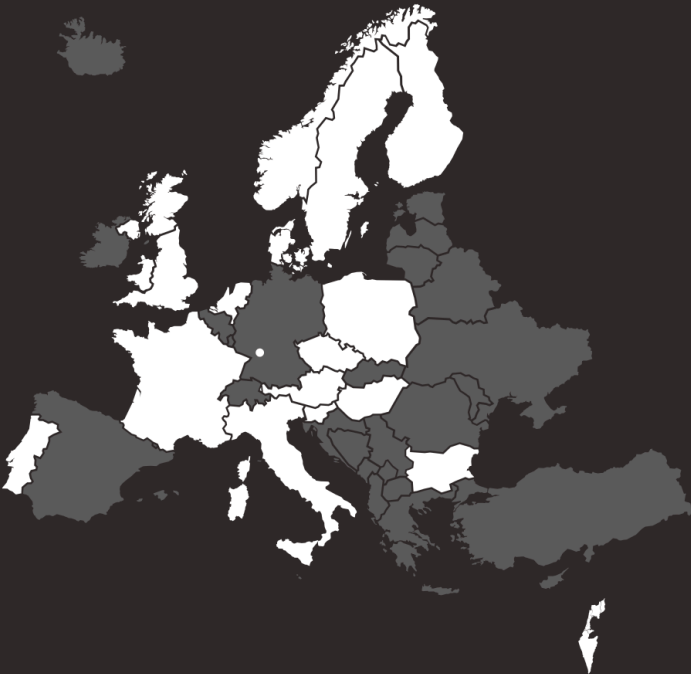
> HUMAN IMAGING ⓘ

> ANIMAL AND PLANT IMAGING ⓘ

> EX-VIVO AND MATERIALS IMAGING USING BIOMEDICAL
TECHNOLOGIES ⓘ

> IMAGE DATA AND IMAGE ANALYSIS SERVICES ⓘ

> OTHER TECHNOLOGIES ⓘ



Available Nodes:

Click on category or map to reset browsing

- Submit a user access request on the Euro-Biolmaging website
- Consultation on technology and Node choice is available for all users

- ✓ Open to all scientists from academia and industry
- ✓ Open to any career stage and area of expertise



Funding for User access

For specific research topics, researchers can apply for free access to participating Euro-Biolmaging facilities through EC funding



Funding support for infectious disease research from 2022-2025

www.isidore-project.eu

Calls open on a running basis on multiple infectious diseases



canSERV

Funding support for cancer research from 2023-2025

www.canserv.eu

First General Open Call for all cancer research launching in Mid-June



Funding support for agro-ecology projects from 2023-2027

www.agroserv.eu

First Open Call to open latest September 2023

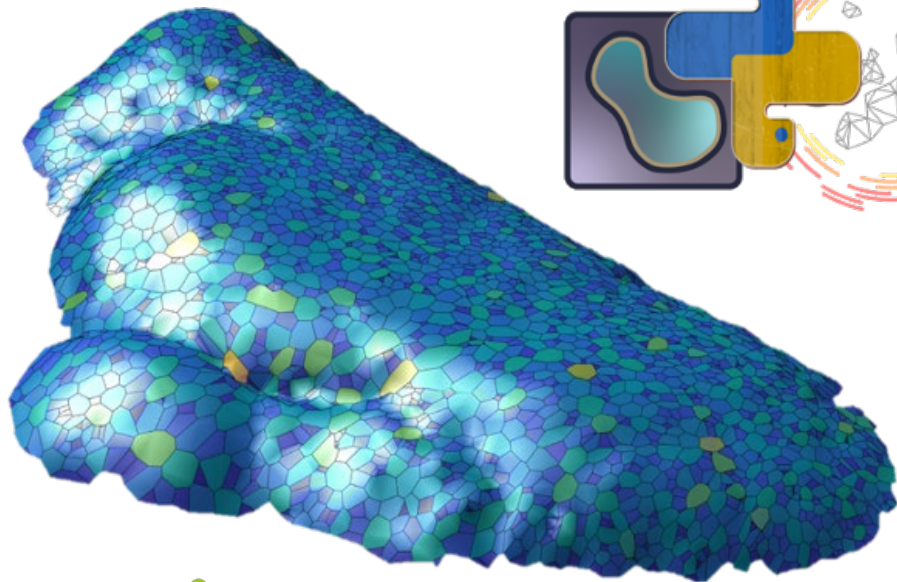
Image Data Services

Image data services at Nodes for the Users

Now available as
Proof-of-Concept

Image Data Analysis as a Service

Stand-alone service on data acquired externally by the user



10 Nodes from 9 countries offer these services



- Share Image analysis expertise
- Visibility to expert image analysts at nodes
- Promote FAIR image analysis practices
- Exchange of Experience through Image data expert group

Image Data Services at Euro-BioImaging

Practical and Technical Services:

- Image Analysis Services and tool development from Nodes
- Technical Support for this service delivery
- Tool development for cloud computing and data sharing
 - Imaging@Galaxy
 - BAND Remote Desktop
- FAIR Image Data
 - Support of Open Image Data Repositories
 - FAIR Image Data Steward – User support for data FAIRification



Data mobilisation on the BioImage Archive

Supported by the Euro-BioImaging Image Data Steward, Isabel Kemmer, and the BioImage Archive team, Katrín submitted the entire microglia imaging datasets behind her paper to the BIA - a total of 700 Gigabytes of data in ~600 files from lightsheet and confocal live cell imaging.



The BioImage Archive really is a fantastic effort. Despite the hard work, I'm really glad I did this. It feels like a big step towards more sustainable science."

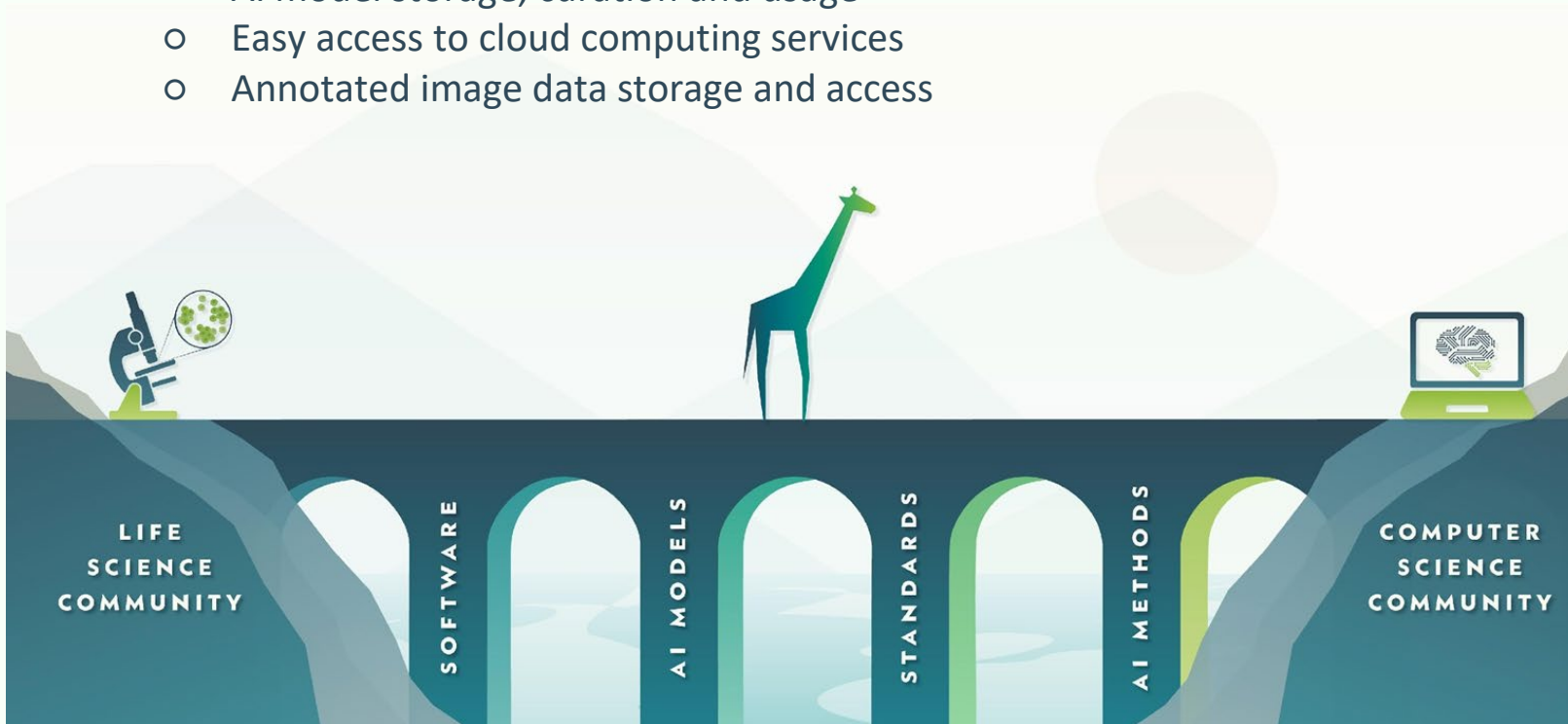


Katrín Möller, post-doctoral researcher at Biomedical Center of the University of Iceland

View the data: <https://www.ebi.ac.uk/biostudies/BioImages/studies/S-BIAD564>

AI4Life: AI-based image analysis methods for life scientists

- Project coordinated by Euro-BiolImaging
- Leveraging pre-existing resources BiolImage Model Zoo (bioimage.io)
- Address technical challenges in:
 - AI model storage, curation and usage
 - Easy access to cloud computing services
 - Annotated image data storage and access



Opportunities to participate:

- Open Calls
- Challenges
- Hackathons
- Trainings

Community building

EURO-BIOIMAGING VIRTUAL PUB

EVERY FRIDAY AT 13:00 CEST via ZOOM

September

1

Career Development for Imaging Core Facility Staff - Global Biolmaging Recommendations
Kerry Thompson and Graham Wright

8

Correlative Atomic Force Microscopy (AFM) and Fluorescence Microscopy/Spectroscopy for Structural Biology
Luca Costa, CRCN CNRS

15

Correlated Imaging Series
Cerenkov and Optoacoustic Imaging for Molecular Pharmacology
Jan Grimm, Sloan Kettering Institute

22

Special Edition Virtual Pub
Open Hardware in Imaging
Selected speakers, In collaboration with EBIB

29

Euro-Biolmaging Scientific Ambassadors Program
Beatriz Serrano-Solano, Euro-Biolmaging
Fast MHz Microscopy and Multi-Projection X-ray at the XFEL
Antonio Bonucci and Patrik Vagovic, DESY

October

6

TBD
TBD

13

NGFFs for image analysis and data sharing
Bugra Özdemir, Euro-Biolmaging & Joel Luethi, Friedrich Miescher Institute for Biomedical Research

20

volumeEM Series
CLEMReg: An automated registration algorithm for correlative light and volume EM
Daniel Krentzel, Institut Pasteur

27

EBRAINS/Euro-Biolmaging Workshop
Multiscale imaging expertise in Neuroscience
Selected speakers



www.eurobioimaging.eu/about-us/virtual-pub



info@eurobioimaging.eu



@EuroBioImaging





OPEN HARDWARE IN IMAGING

FRIDAY, 22 SEPTEMBER 2023, 13:00 - 15:00 CEST

SUBMIT AN ABSTRACT:



Euro-BioImaging Expert Groups - A forum for exchange for the Nodes community

TECHNOLOGY EXPERT GROUPS



Biomedical Imaging Technologies
Light Microscopy
Electron Microscopy
Plant Imaging

ADDITIONAL EXPERT GROUPS



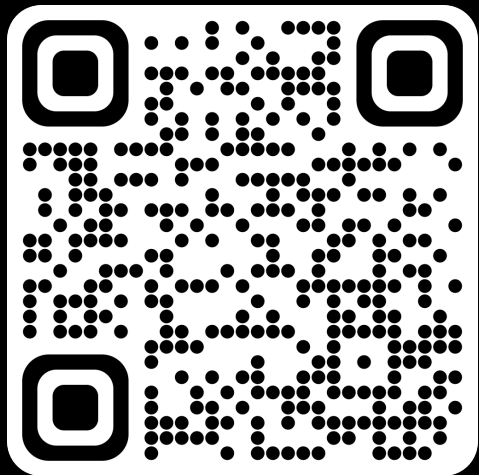
Image Data
Preclinical & medical imaging data management
Quality management at biomedical imaging facilities

Communications
Remote Access & Training
User Access Management Systems

Ethics in Imaging



Thank you for your attention



To find out more, read our
Annual Report 2022!

For more information, please contact us:



www.eurobioimaging.eu



info@eurobioimaging.eu



[@EuroBioImaging](https://twitter.com/EuroBioImaging)

