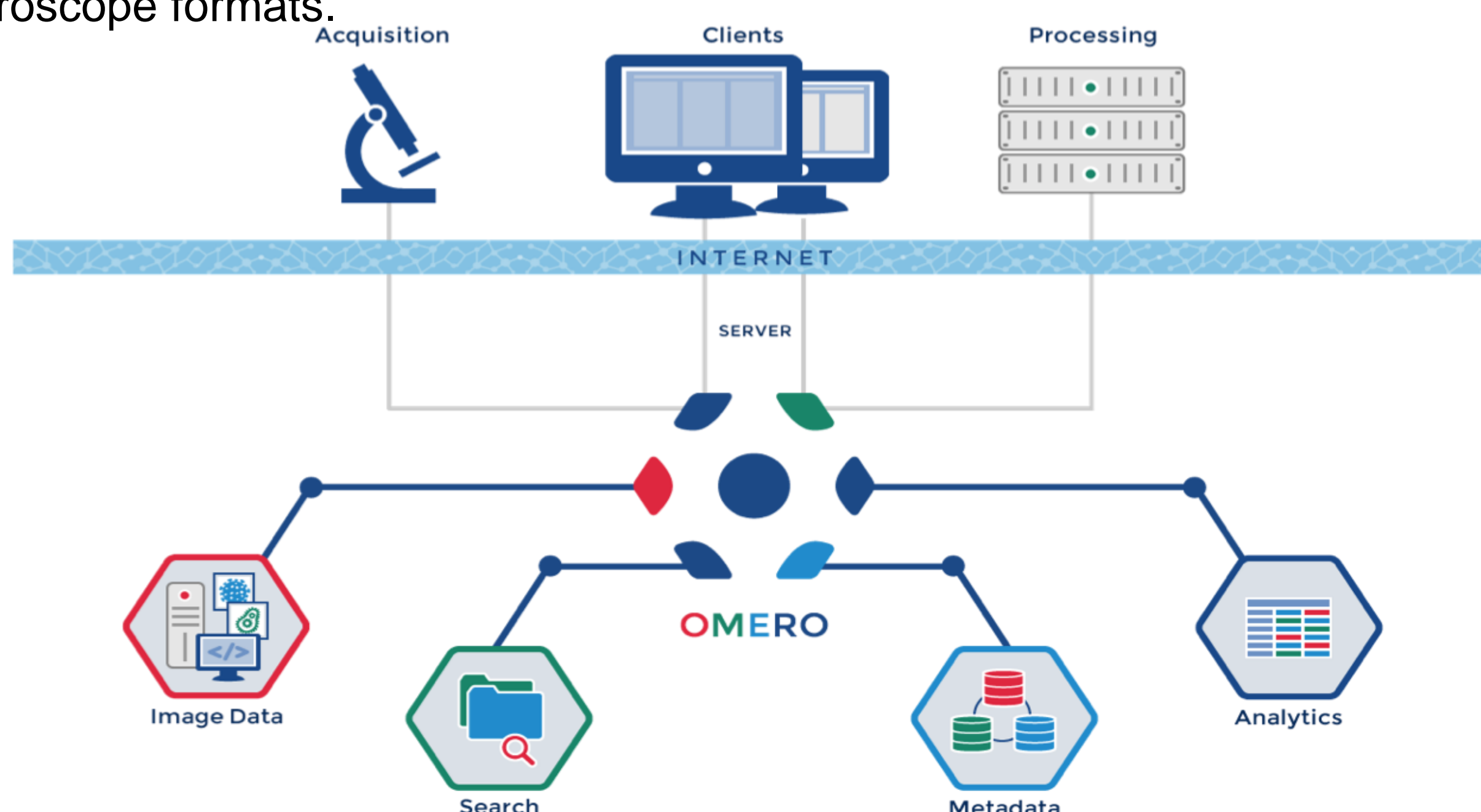# WWU MÜNSTER

CELLS IN MOTION Interfaculty Centre

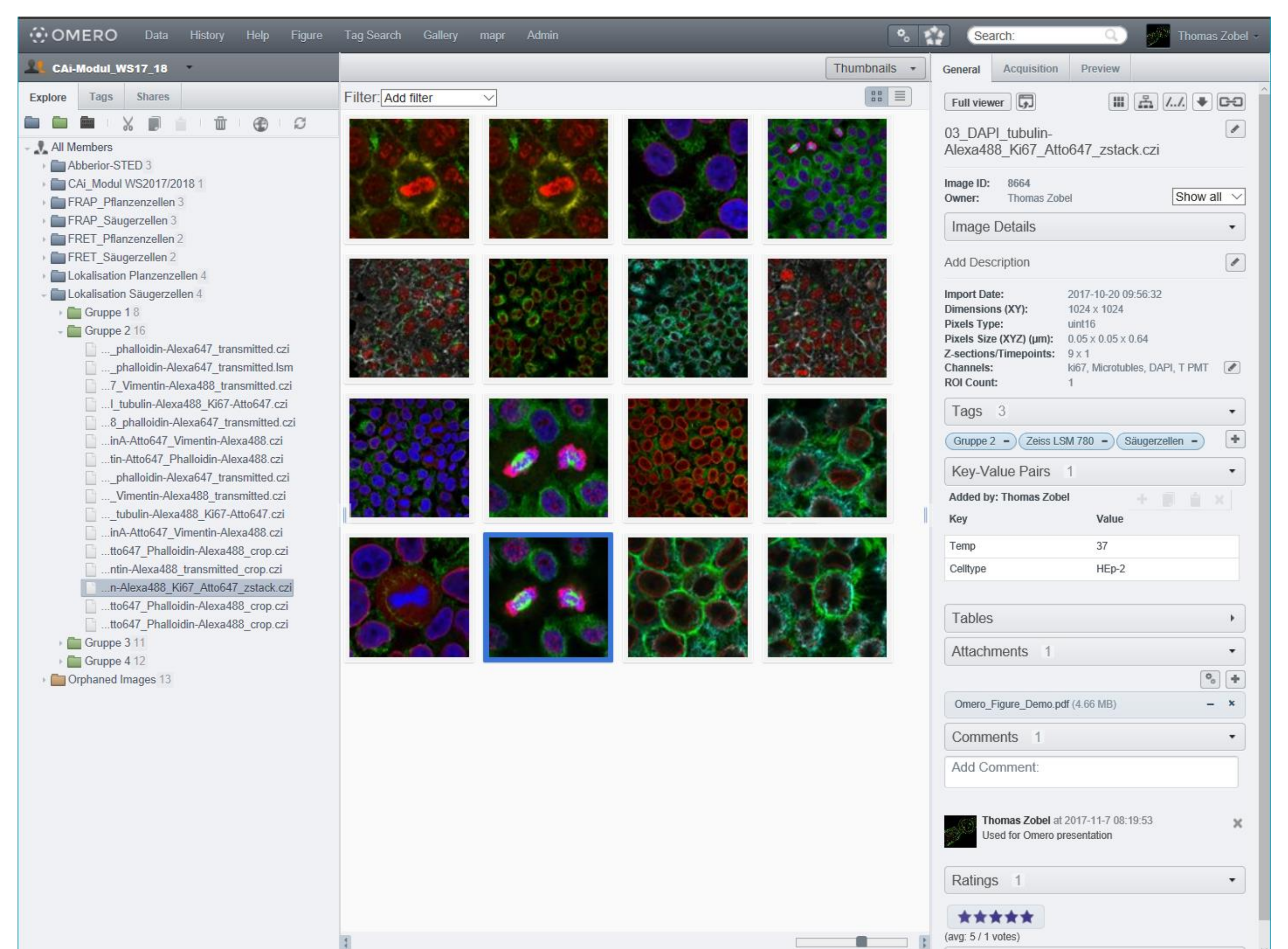**Dr. Thomas Zobel, Imaging Network,** Cells in Motion Interfaculty Centre

OMERO - client-server for managing and visualizing microscopy images

What is OMERO?

OMERO stands for Open Microscopy Environment and is a client-server environment. From the microscope to publication, OMERO handles all your images in a secure central repository. You can view, organize, analyze and share your data from anywhere you have internet access. Work with your images from a desktop app (Windows, Mac or Linux), from the web or from 3rd party software. Over 140 image file formats supported, including all major microscope formats.
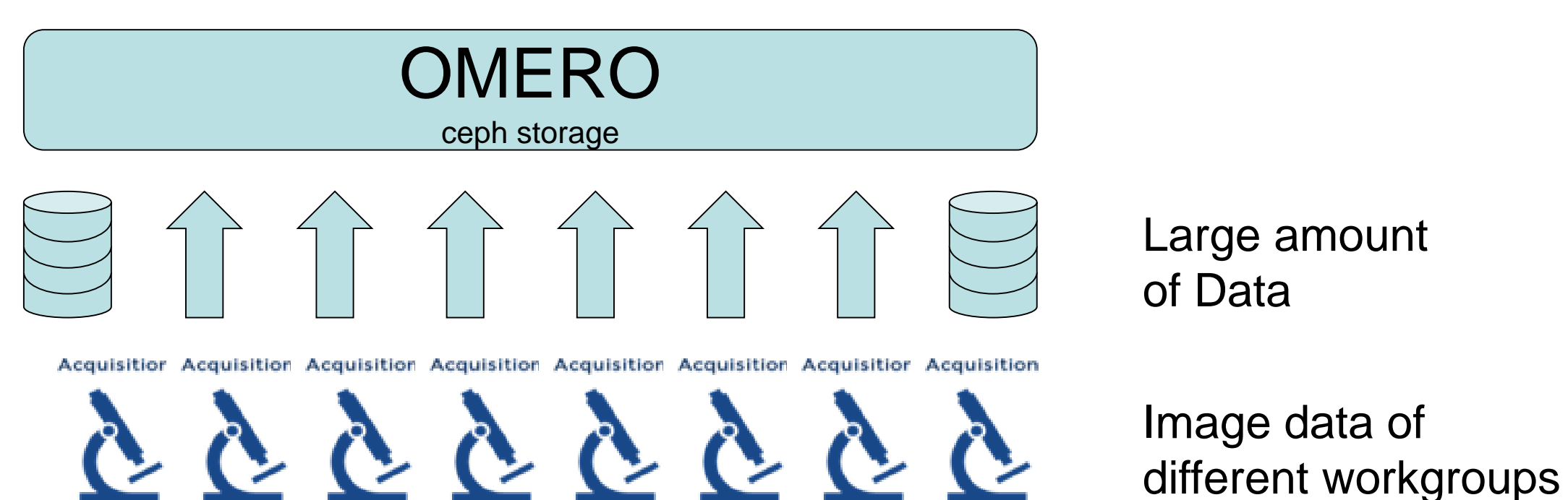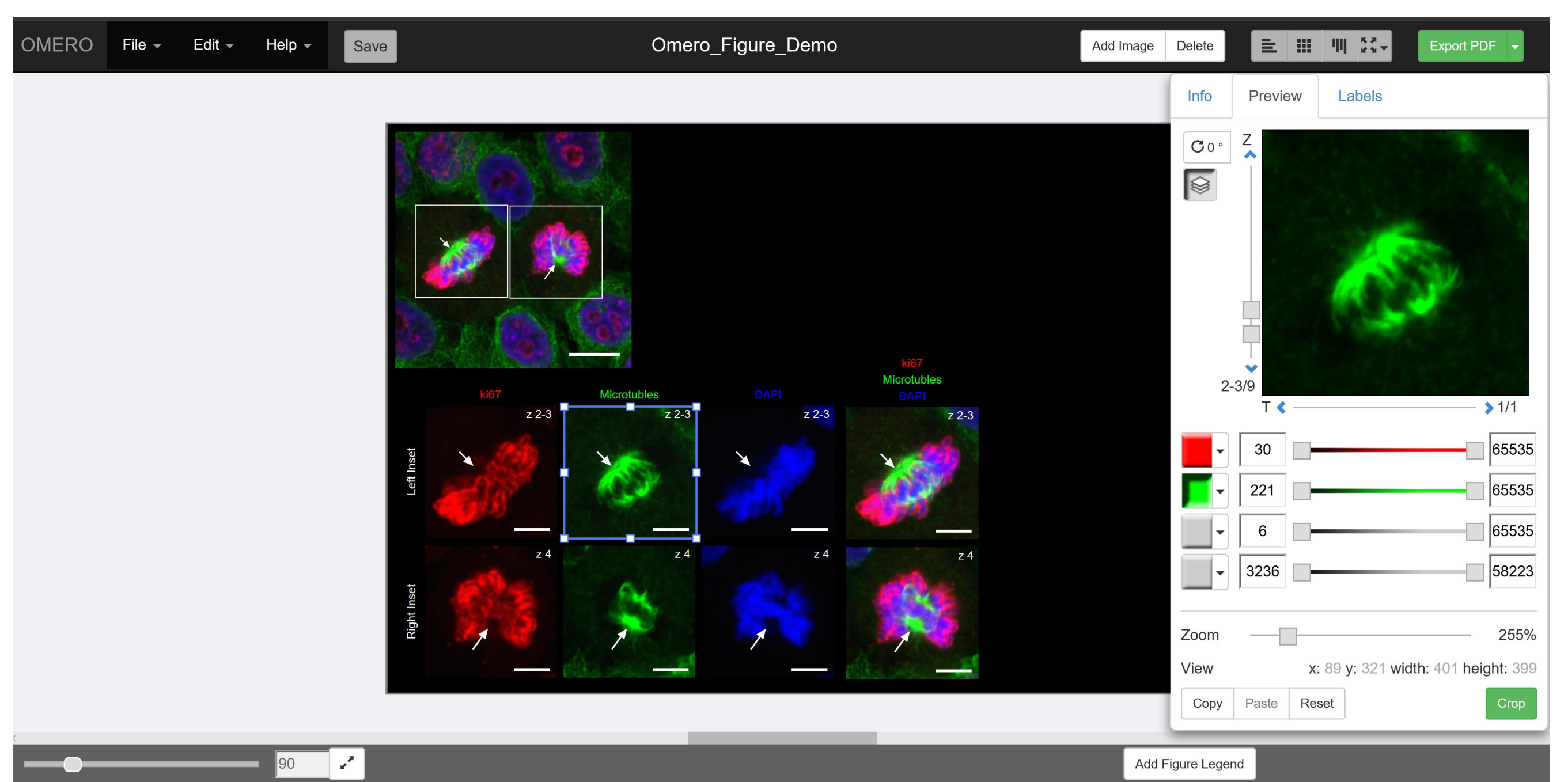

Modern web interface:

Why using OMERO?

Modern microscopy systems generate easily a considerable amount of data. In some cases data of up to 1000GB can be generated in one day. This data must not only be stored securely, but also stored together with metadata and with annotations about the experiment. The image data in OMERO is stored on the new ceph file system of the ZIV, which guarantees a secure long-term storage. The use of OMERO also makes the data very easy to annotate, ensuring that the experiments can be traced.
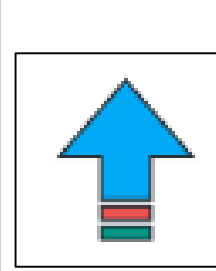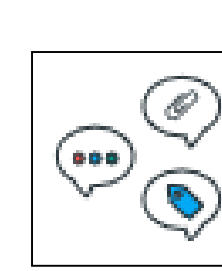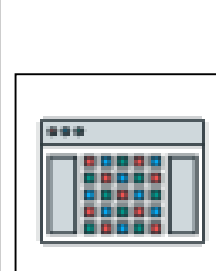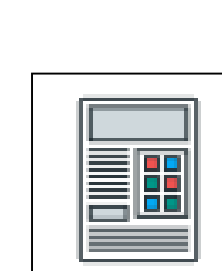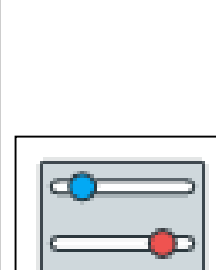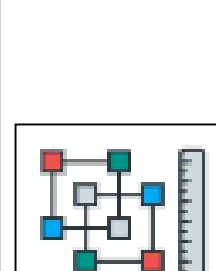

OMERO.figure:

OMERO.figure combines OMERO's powerful image rendering and metadata to provide a tool for rapid figure creation. Each panel of the figure becomes a multi-dimensional image viewer, allowing you to zoom and pan, adjust rendering settings and even scroll through Z and Time. Figures can be exported as TIFF images or PDF documents, so you can move seamlessly to other editing tools such as Adobe Illustrator.

Features:

- Import over 140 image formats from different microscopes
  Read original metadata

- Add metadata like tags, key-value pairs, ratings or comments to multiple or single images

- View your image data over the internet from anywhere
  Browse thumbnails, image previews and view Z-projections

- Use OMERO.figure to quickly draw figures for presentations, meetings and publications
  Export figures as pdf, tif and vector graphics

- Adjust the rendering settings for your images
  See the settings from other group members

- Share your data within your group including annotations, comments, adjustments and tags

- Draw ROIs and use basic analysis

- Open images directly in ImageJ/Fiji
  Save ROIs, overlays and results from Fiji into OMERO

Further informations:

- The use of the OMERO server is free of charge for workgroups of the WWU
- Informations about the OMERO server at the WWU can be found at the website of the Imaging Network **go.wwu.de/imagingnetwork**

- OMERO is open source software and is developed the OME-Team (Open Microscopy Envirement) of the University of Dundee.
- Official Website www.openmicroscopy.org/omero/

living.knowledge