

## Using the LCI OMERO server for data management, sharing and much more

### **1. What is OMERO and how can it help you?**

OMERO is an image data management tool which allows you to easily view, annotate, analyse, share your data and prepare figures for publications or posters.

- The KI OMERO server is located inside KI so it is safe to use. The server can be safely accessed online from anywhere.
- The images are uploaded in the original format delivered by the microscope, so all the metadata (all details of the acquisition) is preserved.
- OMERO is an internationally recognized freeware that can be mentioned in the data management sections of grant proposals.

### **2. How to get started**

#### **a. Ask the LCI staff to create an account for you on the LCI OMERO server.**

We will send you an email with your credentials.

#### **b. Change your password**

Open your browser and type omero.ki.se in the address bar. Login with your credentials. The first time you log in, change your password by clicking on your name at the top right and selecting User settings. It is best to use a password that is not the same as your KI password to avoid getting confused when you change your KI password.

#### **c. Download the OMERO.Insight client software to your computer.**

OMERO.Insight is a freeware located on your computer. **OMERO.Insight is only used to upload images to the LCI OMERO server, not to work on them.**

Follow the instructions [in this video](#) to install OMERO.Insight and log in to your account on the LCI OMERO.ki.se server.

For Windows users: download the .exe file. The server address is omero.ki.se.

If you get a message when downloading saying that 'the developer has not been verified', do the following:

- Open your System Preferences, you can do it if you click on Apple icon in top left of your Mac screen, see [1]
- Find the "Security and Privacy" icon and click onto it [2]
- Make sure you are on the "General" tab in the window which newly opens [3]
- Click "Open Anyway"
- In the new dialog, click "Open" [4]

### **3. How to use OMERO**

#### **a. Upload data to the database**

To upload data, use OMERO.insight, follow the instructions in the video above to upload all your images to the server.

Only upload images in the original format delivered by your microscope.

[Help to upload images to the server with OMERO.Insight.](#)

**Once the upload is finished, close OMERO.Insight as it is only used to upload data, not to work on them.**

### **b. Work with your uploaded data via your browser.**

Once the images are uploaded to the OMERO.ki.se server, use your browser from anywhere to access the server and share, view, annotate, analyse or make a figure with the uploaded data. Simply type omero.ki.se in your browser address bar and log in with your OMERO credentials.

Note that in OMERO.web, the thumbnail of uploaded files can only be viewed after the file conversion is finished which may take a while for large files. During the conversion, a clock icon is shown.

See how to use the OMERO basic operations in [this video](#).

### **c. Make figures and poster with OMERO.figure**

OMERO.figure is a fantastic tool to easily make figures for publication.

OMERO.figure will allow you to:

- All images can automatically be aligned just in one click
- Add a scale bar and any annotation you want (arrows, text, freehand form...)
- Adjust brightness and contrast in all similar channels in the same way
- Split the image to show the overlay in colour and each channel in black and white
- Change the name of the channels and place the name e.g. vertically or horizontally near each line or row of images
- Include any segmentation that you have done in another software
- Show a full image as well as a zoomed view of that image. Moving the zoomed area in the full image will automatically update the zoomed view for all channels
- And much more 😊

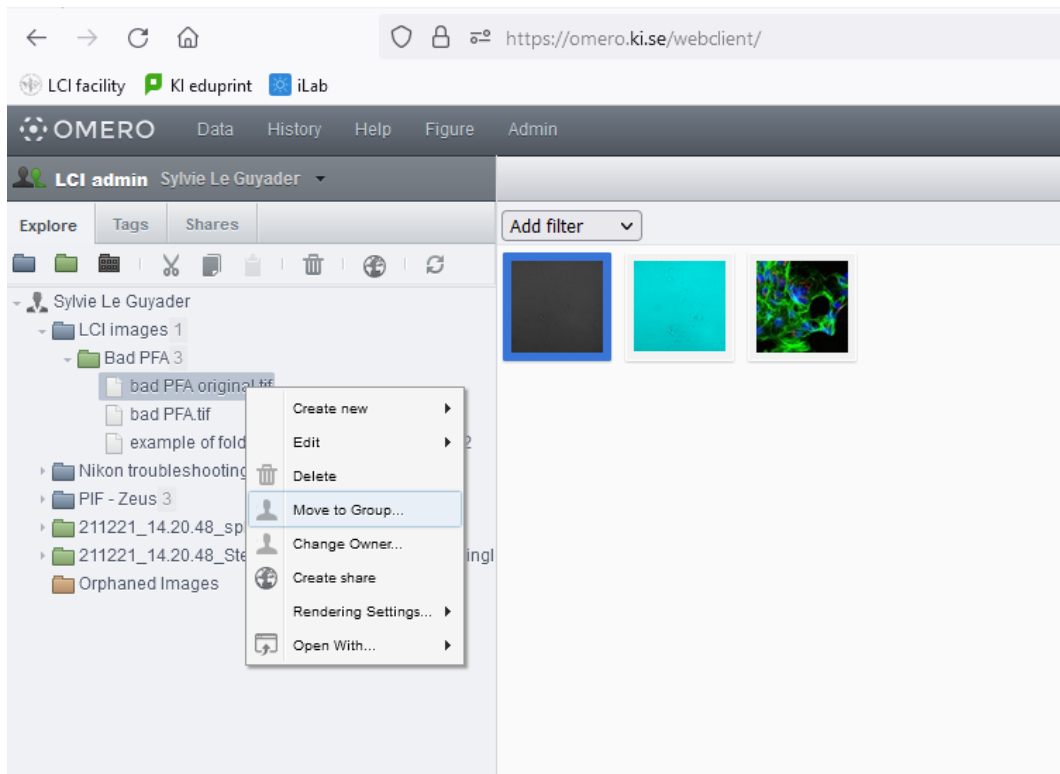
To create a figure from your data, follow the instructions in [this video](#).

### **d. Tips**

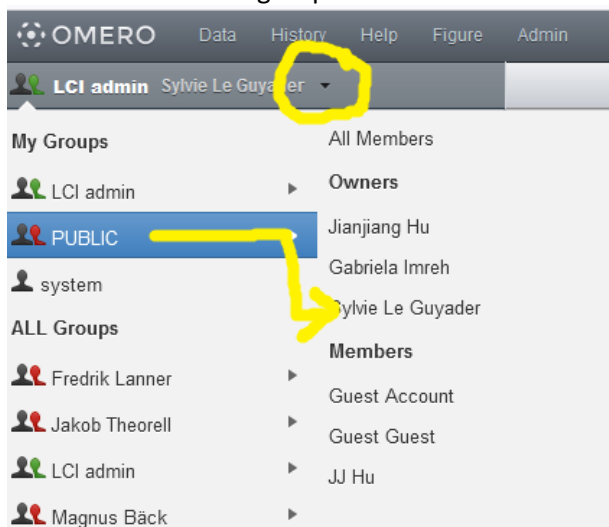
- If you double click on an image, the full viewer opens. Instead open the image in [iViewer](#) as shown in this video.
- Here is [how to draw ROIs](#). Note that you need to use Click - Move - Click to create an ROI, not Click and Drag as this moves the image. ROIs created in other software (e.g. Fiji, Python...) can also be imported in OMERO.
- Note that drawing an ROI is not done the same way in the full viewer (1 single click to select the starting point of the ROI and 1 single click to select the end) and in OMERO.figure/label (Click at starting point, drag and drop at end).
- The Draw polygon tool: click shift then draw the shape without clicking, only drawing.
- Select the ROIs by clicking on each ROI row (they become blue) to delete them.
- Using ctrl one can select several images then right click and open in viewer, one can open several images at once.

### **e. Sharing data with KI or external collaborators**

- Ask the LCI staff to create an account for your collaborator. We need the name, which group the collaborator should be associated with and the level of permissions (only viewing or able to download or to modify). Your collaborator will be able to log in to OMERO.ki.se and view the images.
- You can also share the images with a link: Select the images you want to share, click on the link icon on the right side of the screen and send the link to your collaborators.









- Select Public + OK
- At the top, click on the black triangle to the right of your name to navigate to your account in the Public group.



- You can find the image you moved in the Orphaned images folder.
- Click once on the image name to select it. A new menu appears on the right side of the screen. Click on the link icon to be able to copy the link to your image.
- You can find the image you moved in the Orphaned images folder.
- Click once on the image name to select it. A new menu appears on the right side of the screen. Click on the link icon to be able to copy the link to your image.
- Send the link to your collaborator who can paste it in their browser
- Note that the collaborator currently needs an account in our OMERO server. Ask us to create one.

Search:  Sylvie Le Guyader

General Acquisition Preview

Full viewer      




bad PFA original [omero.ki.se/webclient/?show=images-4](https://omero.ki.se/webclient/?show=images-4) 

Image ID: 4  
Owner: Sylvie Le Guyader Show all

Image Details ▼

Add Description 

Import Date:	2022-04-19 11:44:35
Dimensions (XY):	1484 x 1514
Pixels Type:	uint16
Pixels Size (XYZ) (µm):	0.32 x 0.32 x -
Z-sections/Timepoints:	1 x 1
Channels:	0 
ROI Count:	0