OMERO & Fiji

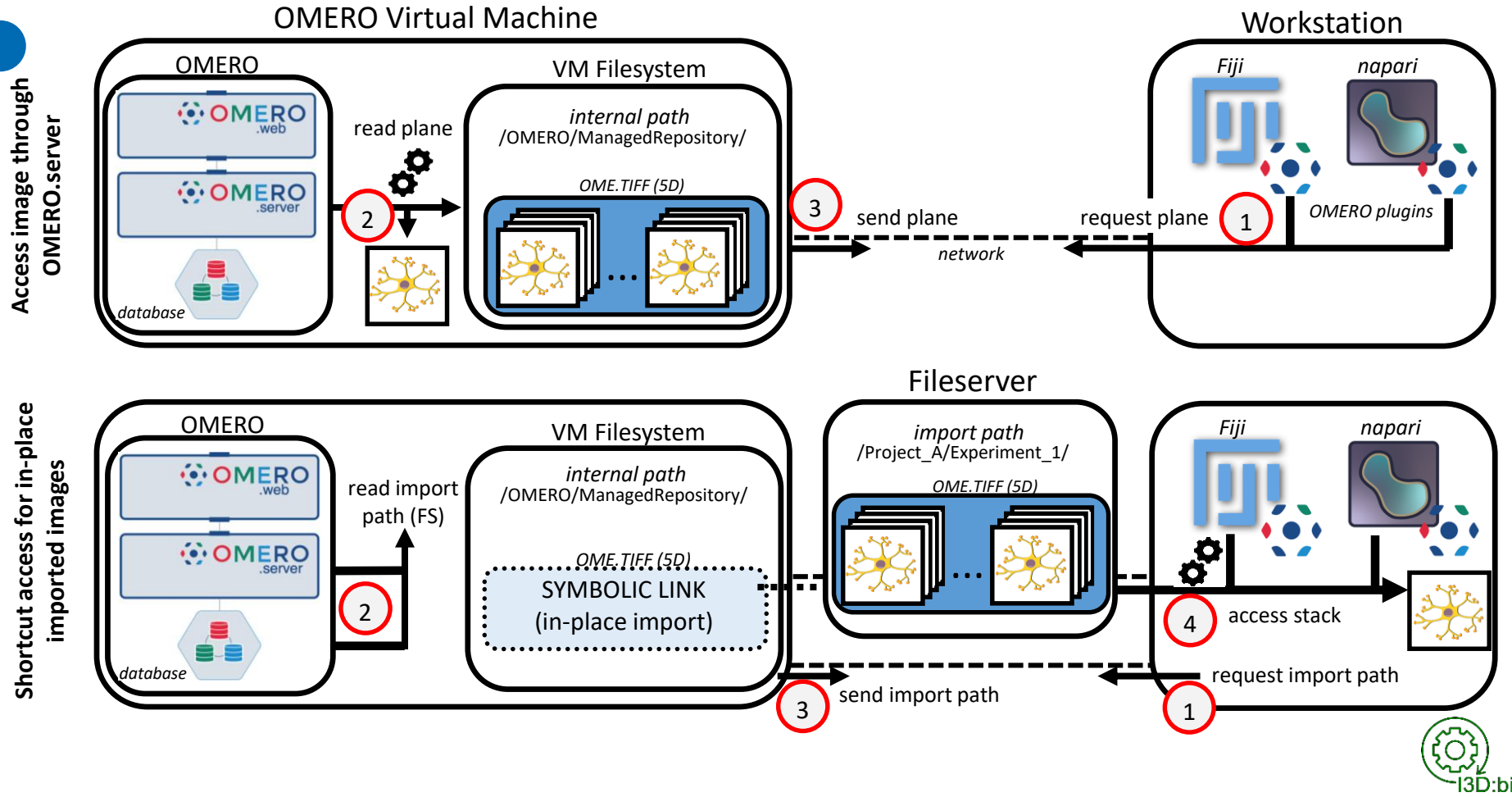
Workshop: **FAIR data handling for microscopy: Structured metadata annotation in OMERO**

April 29th & 30th, 2024

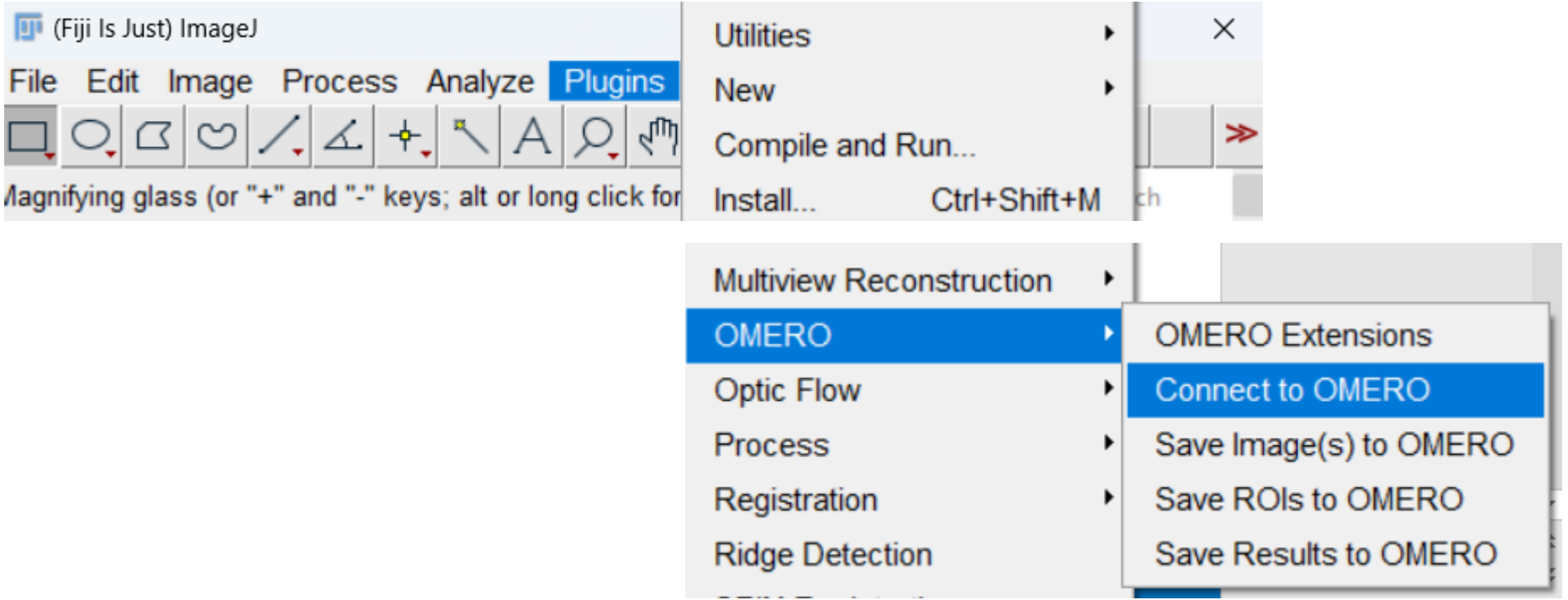
Day 2 Session 8

Trainer: Vanessa Fuchs, **Tom Boissonnet**, Christian Schmidt

30-04-2024



OMERO-Fiji plugin



Fiji - OMERO.insight

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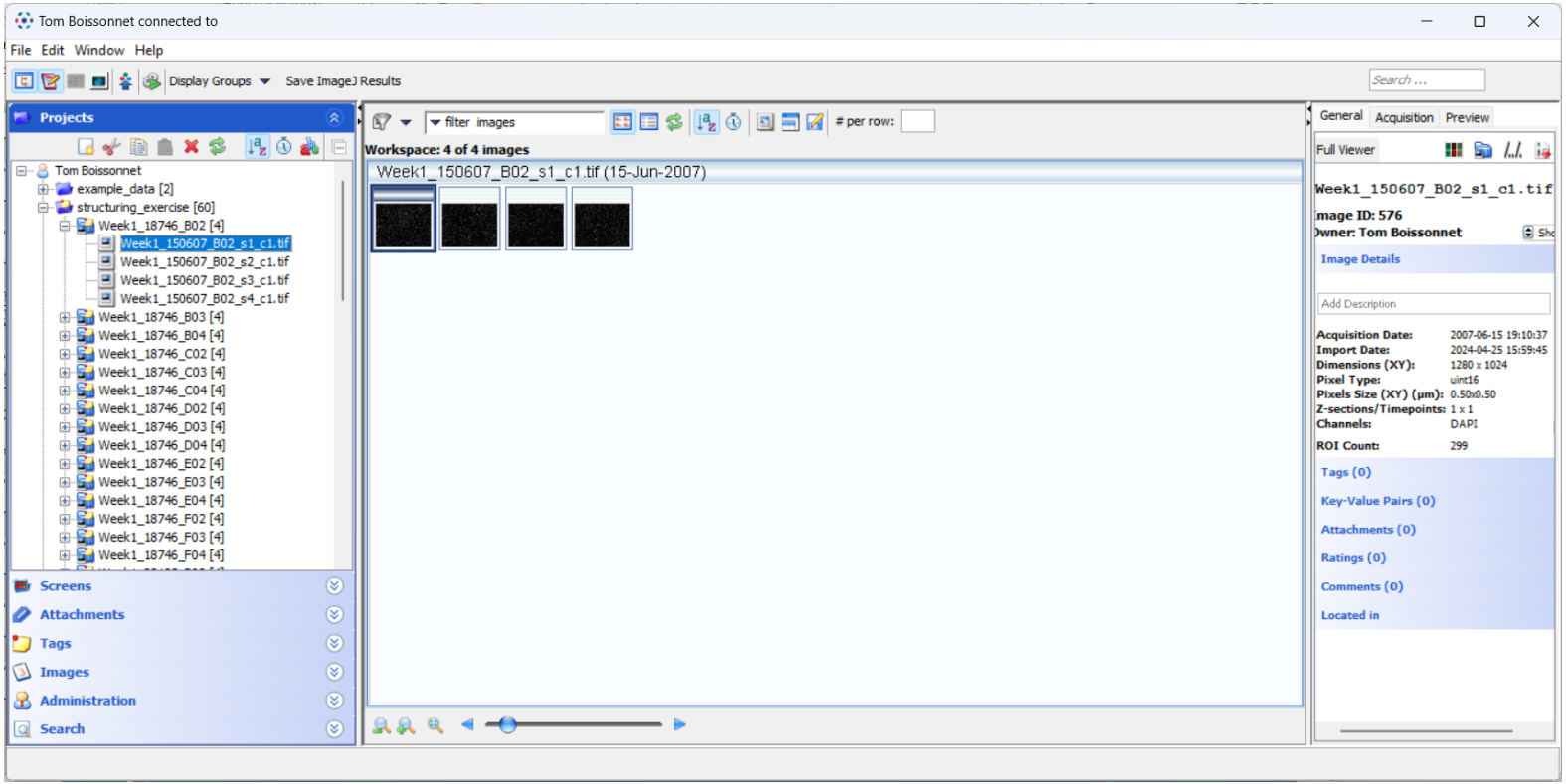
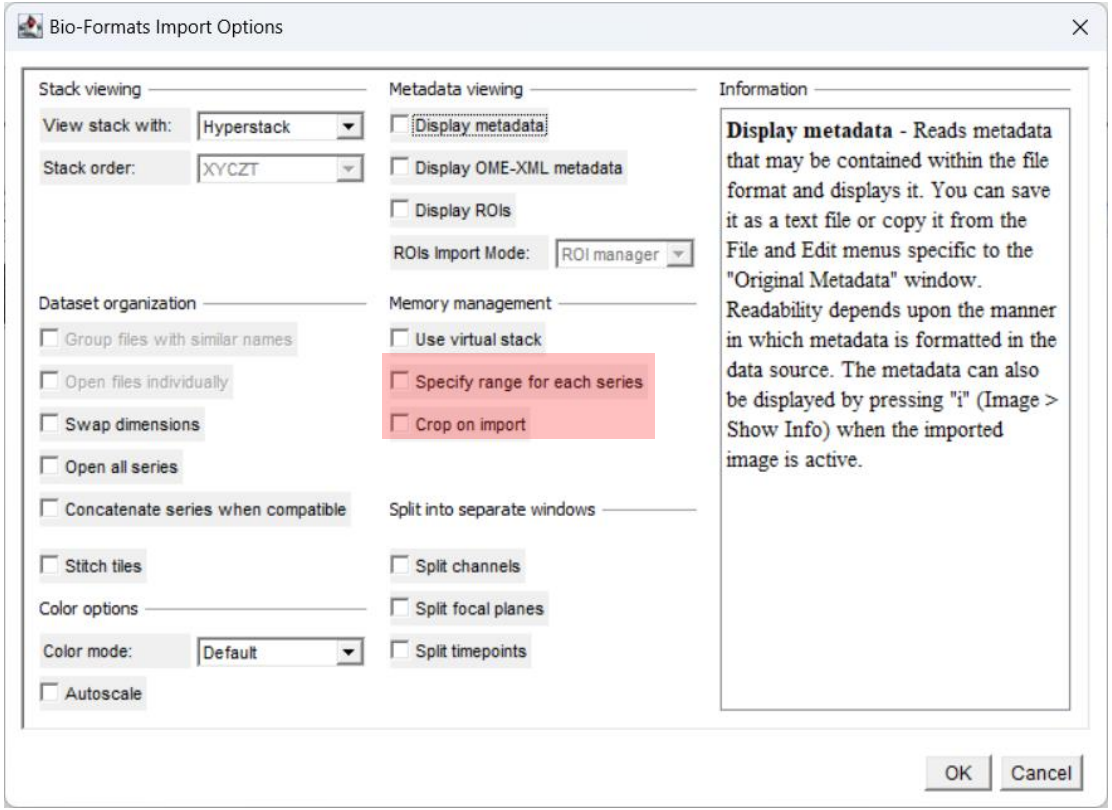


I3D:bio

Bio-Formats importer



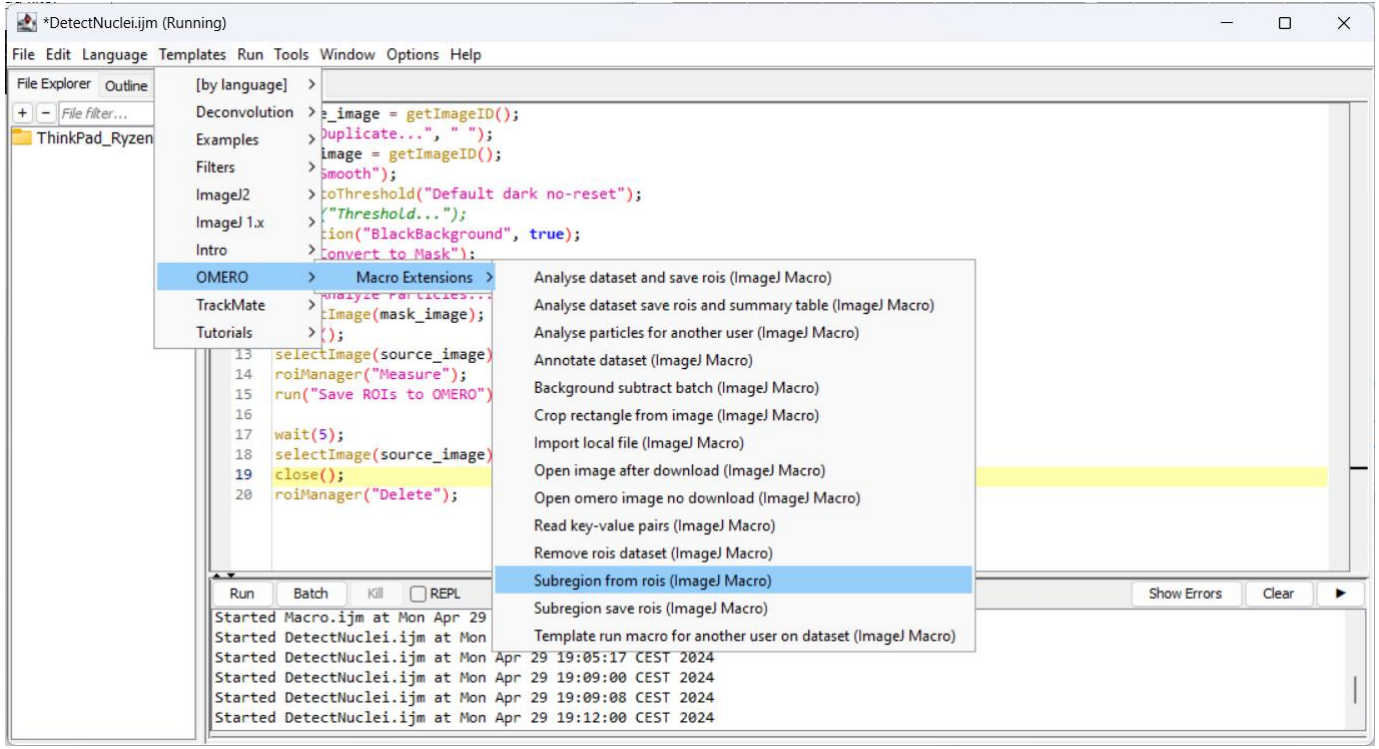
Activity 1

- Do not use batch mode
- Careful with big images

- Goal is to familiarize with the connection to fiji
  - Open images (plate from yesterday) from the Fiji-OMERO.insight client
  - Segment nuclei (manually or with your imageJ skills)
  - Measure the segmented nuclei and upload the results back to OMERO (ROIs and result table)

- Optional: you can use the macro attached to this project to segment your images:
  - With the search bar in Fiji, look at the different function used in the macro

Automatizing - omero_macro_extension



Activity 2

- Goal is to understand how image analysis can scale up
  - Download the macro attached to the project
  - This macro applies the nuclei detection to all images in a dataset
  - What is the result output?

- Do not use batch mode
- Careful with big images

- Look at the table attached to the dataset you processed

- Optional: have a look at the predefined examples
  - Load a subregion from ROI: try it with a reasonably small ROI on a histology image
  - Print a key-value pair from the macro: this could be used in the logic of your script when you need to pair images or get important parameters.