

# OMERO

## Users Training day

### Workshop – links to workflows

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The OME Consortium

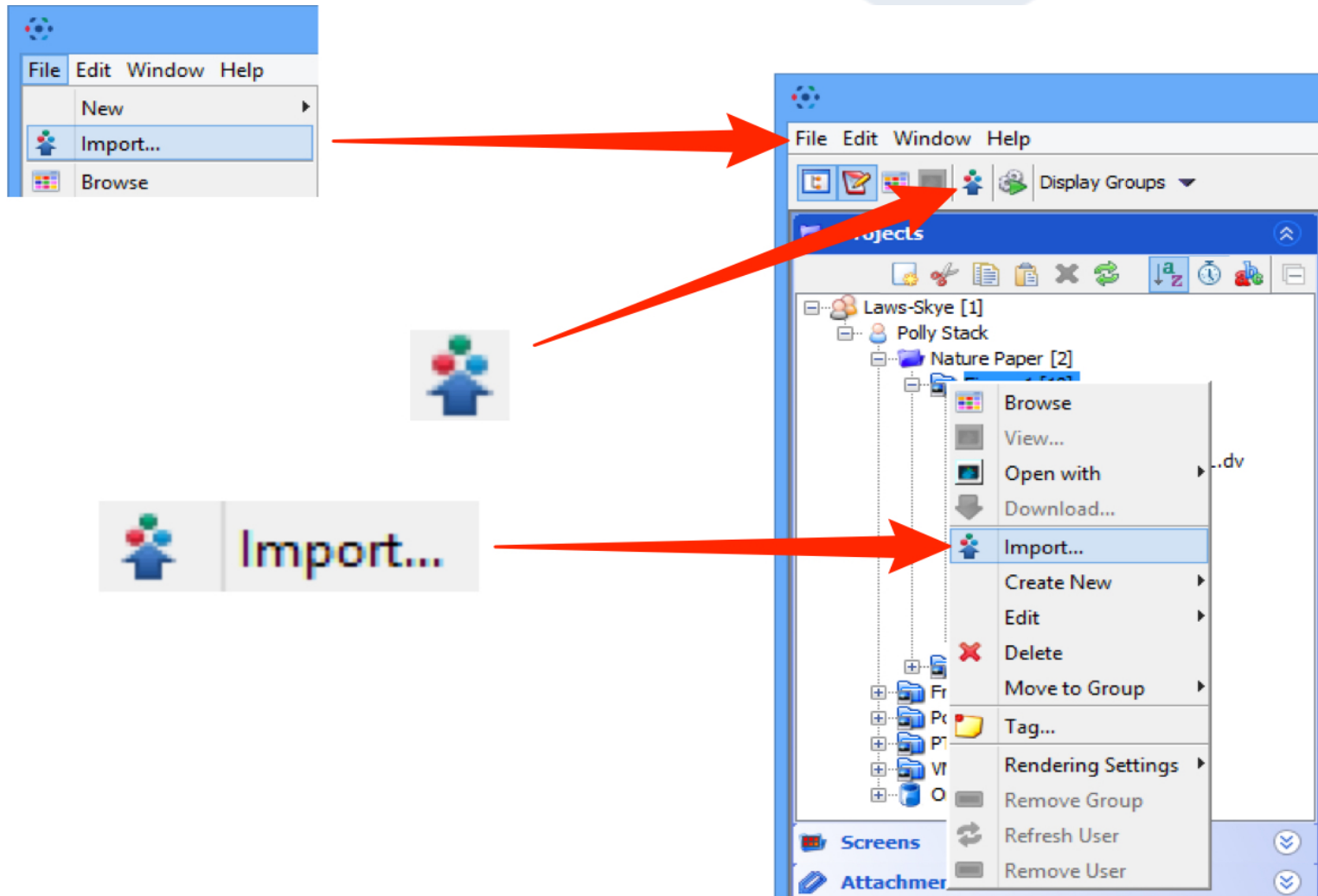


Open Microscopy Environment  
Centre for Gene Regulation & Expression  
School of Life Sciences, University of Dundee  
Dundee, Scotland, UK

# Program of the workshop

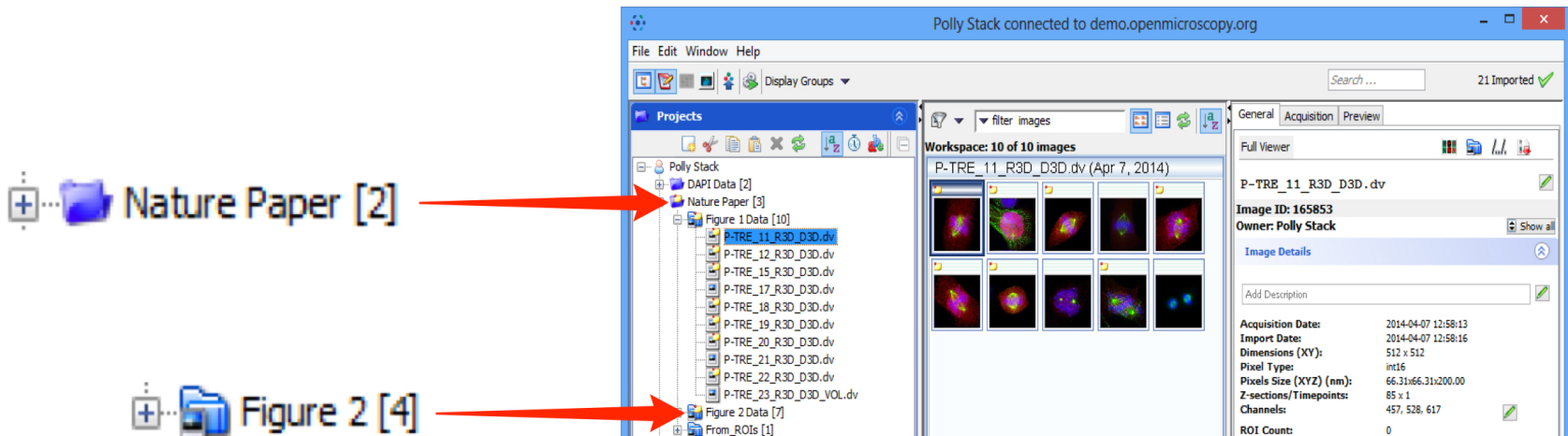
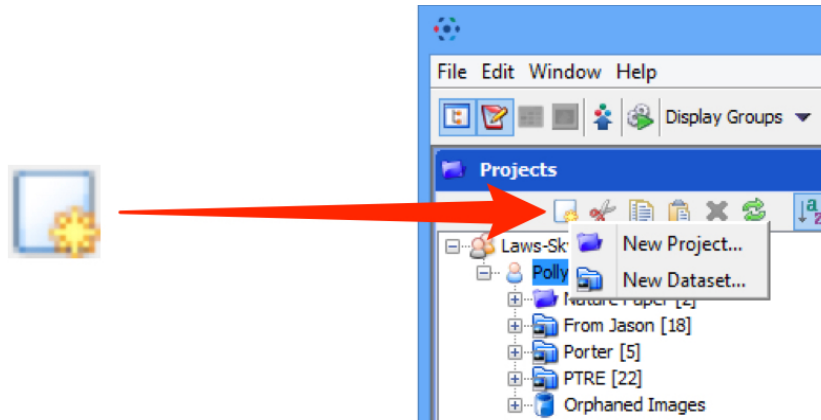
- Getting Started, Importing, Managing, Viewing Data
- Exporting Data, Scripts and Batch Actions, Sharing
- **Coffee**
- OMERO.figure
- **Lunch**
- Data analysis, Sharing and Permissions
- **Coffee**
- Using ImageJ/Fiji for analysis of your OMERO data

# Import data into OMERO



<http://help.openmicroscopy.org/importing-data-5.html>

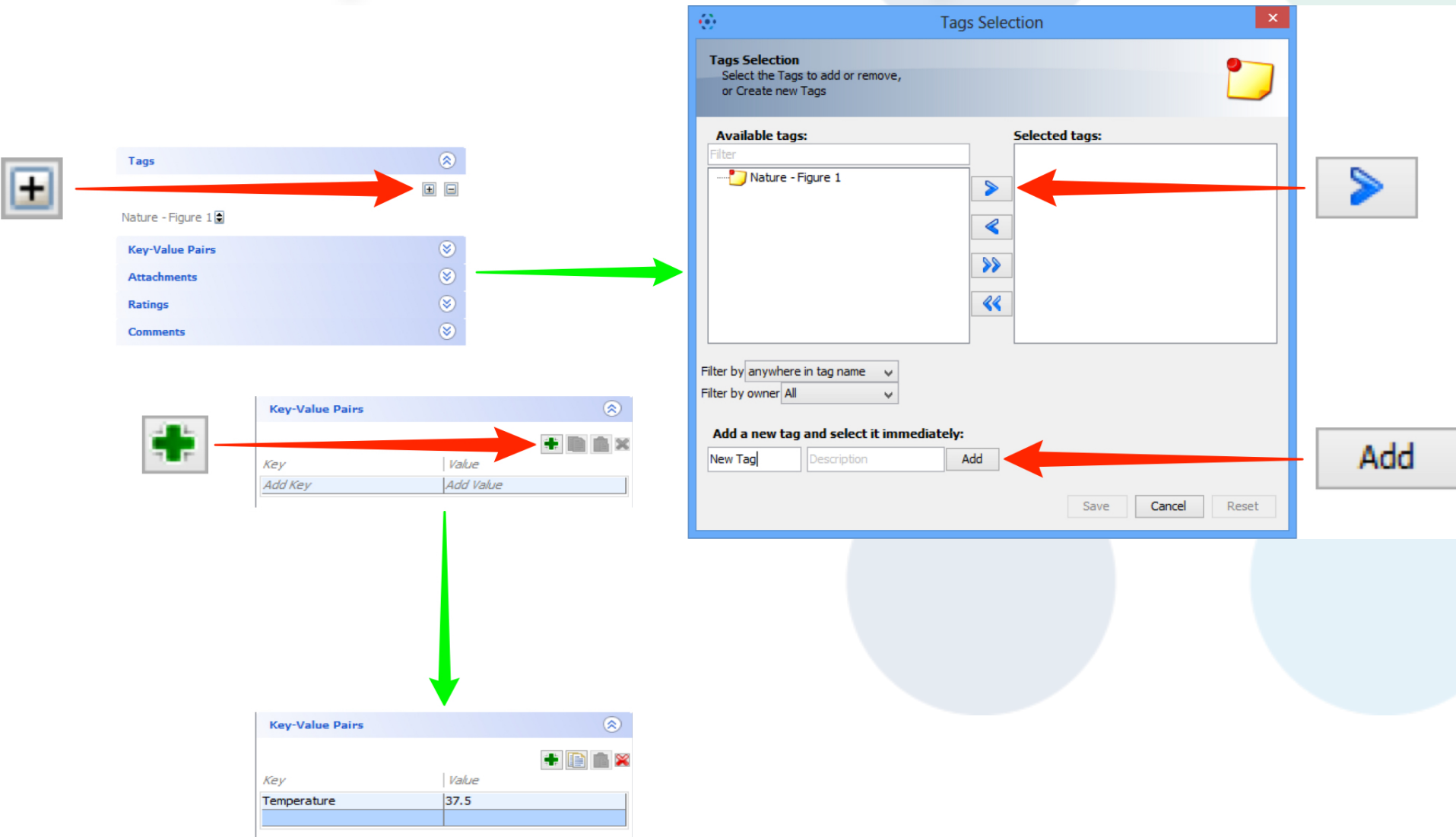
# Manage data in OMERO – create Project and Dataset



<http://help.openmicroscopy.org/managing-data.html>



# Manage data in OMERO – using Annotations



<http://help.openmicroscopy.org/managing-data.html>

# Manage data in OMERO – rename channels of a set of images

The screenshot illustrates the process of renaming channels in OMERO. It shows two parts of the interface: a metadata panel and a channel renaming dialog.

**Metadata Panel:**

- Import Date: 2015-10-27 13:49:26
- Dimensions (XY): 640 x 640
- Pixel Type: int16
- Pixels Size (XYZ) (nm): 50.80x50.80x200.00
- Z-sections/Timepoints: 40 x 1
- Channels: 457.0, 528.0, 617.0, 685.0
- ROI Count: 0

A red arrow points from a thumbnail image of a green and yellow structure to a pencil icon in the Channels field of the metadata panel. A green arrow points from this icon down to the channel renaming dialog.

**Channel Renaming Dialog:**

Channels:

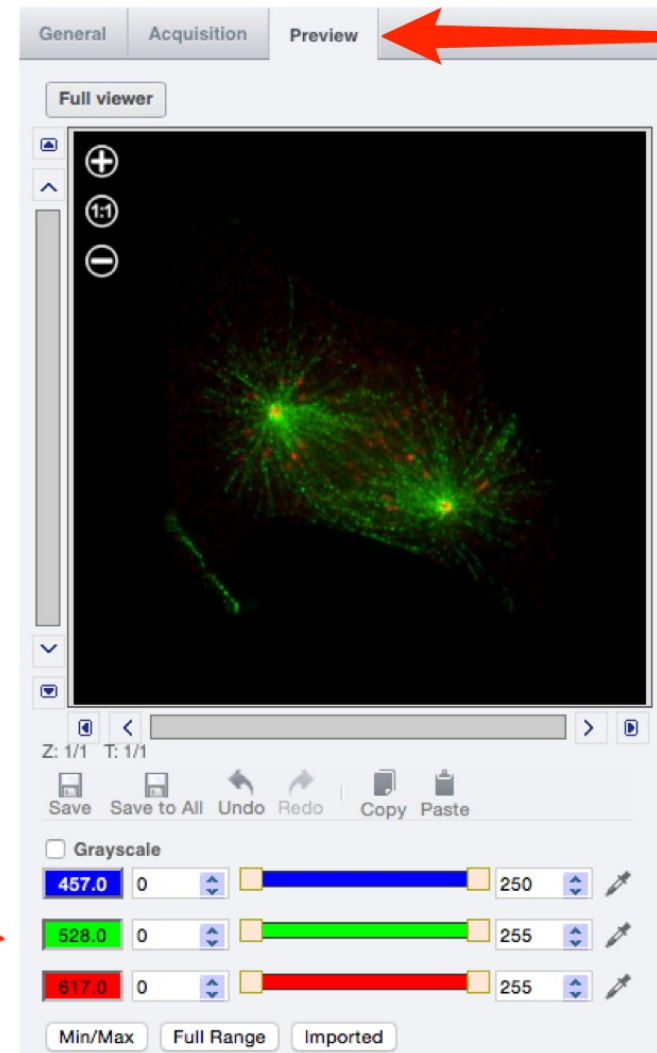
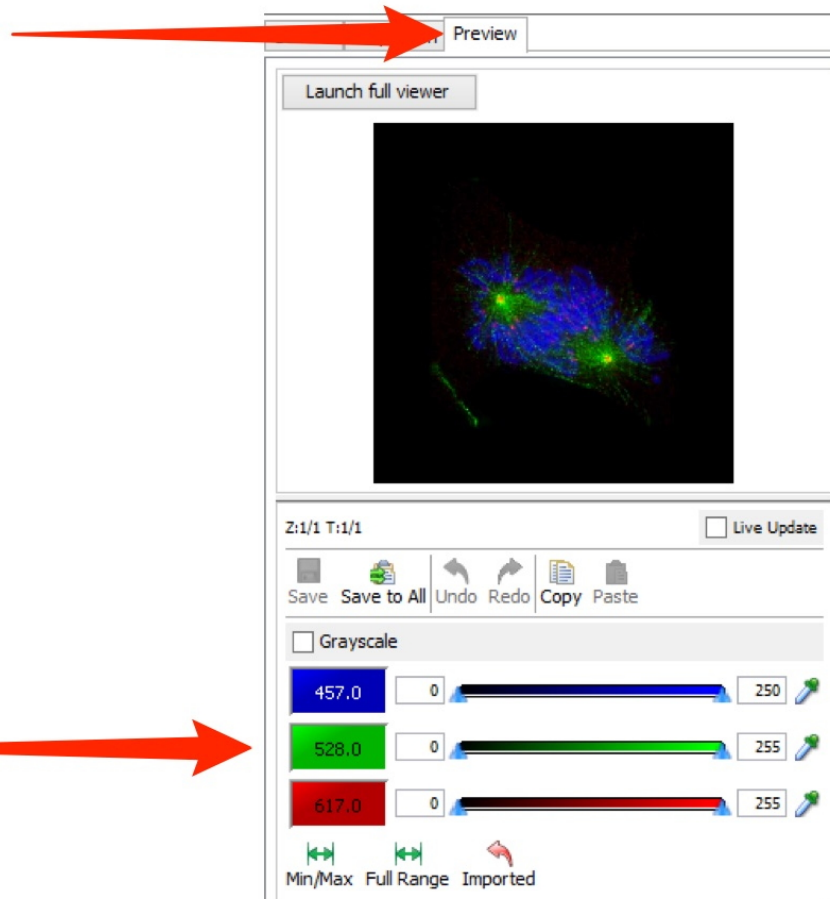
DAPI
528.0
617.0
685.0

Save Apply to All Cancel

A red arrow points from the right side to the 'Apply to All' button.

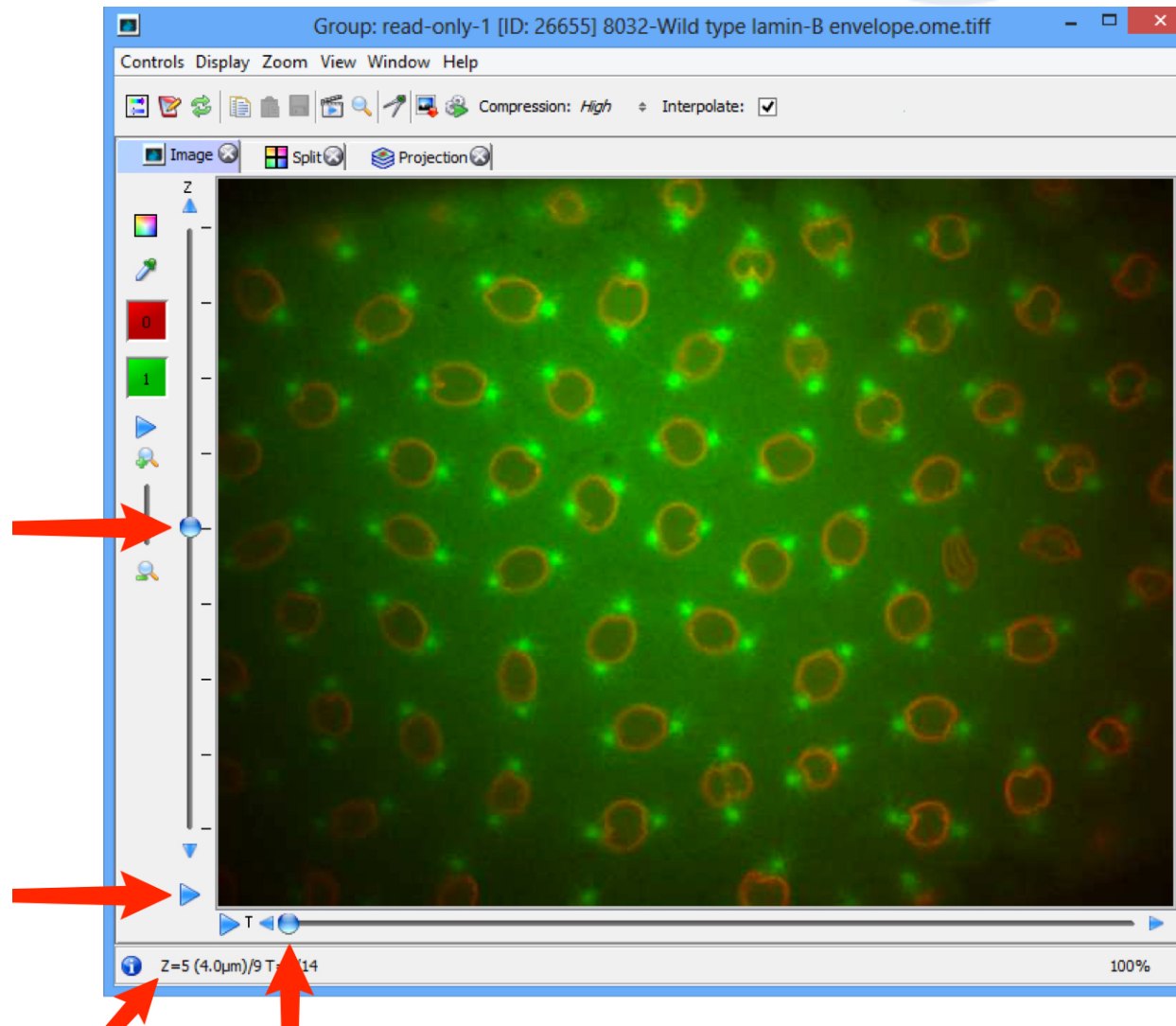
<http://help.openmicroscopy.org/managing-data.html>

# Manage data in OMERO – adjust contrast and brightness, channels display and color (rendering settings) on images



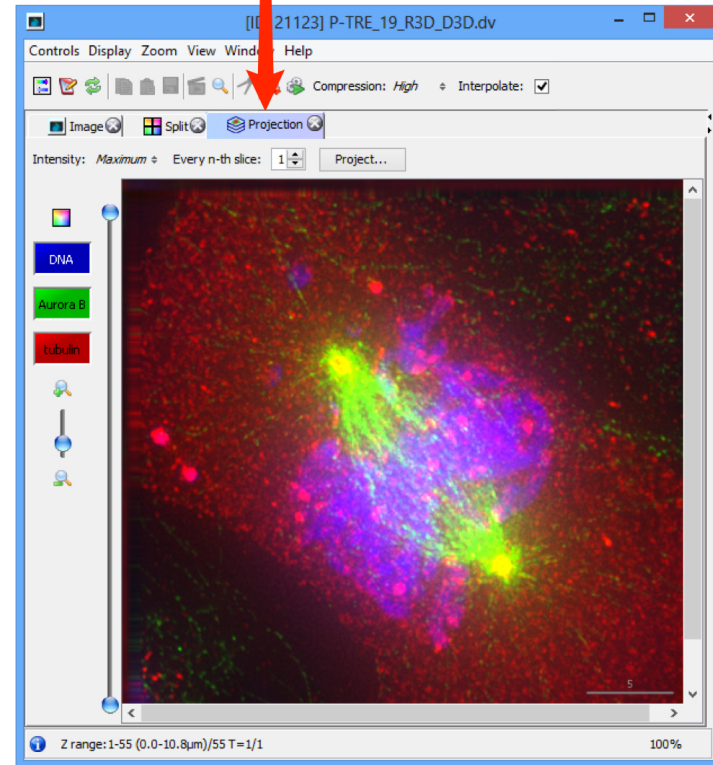
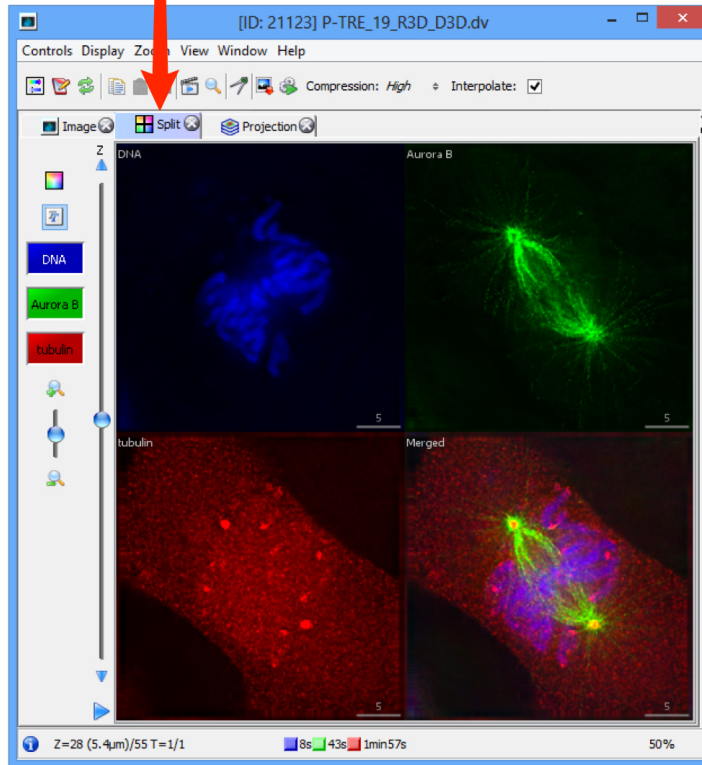
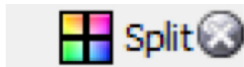
<http://help.openmicroscopy.org/managing-data.html>

# View stacks and timelapse images in OMERO



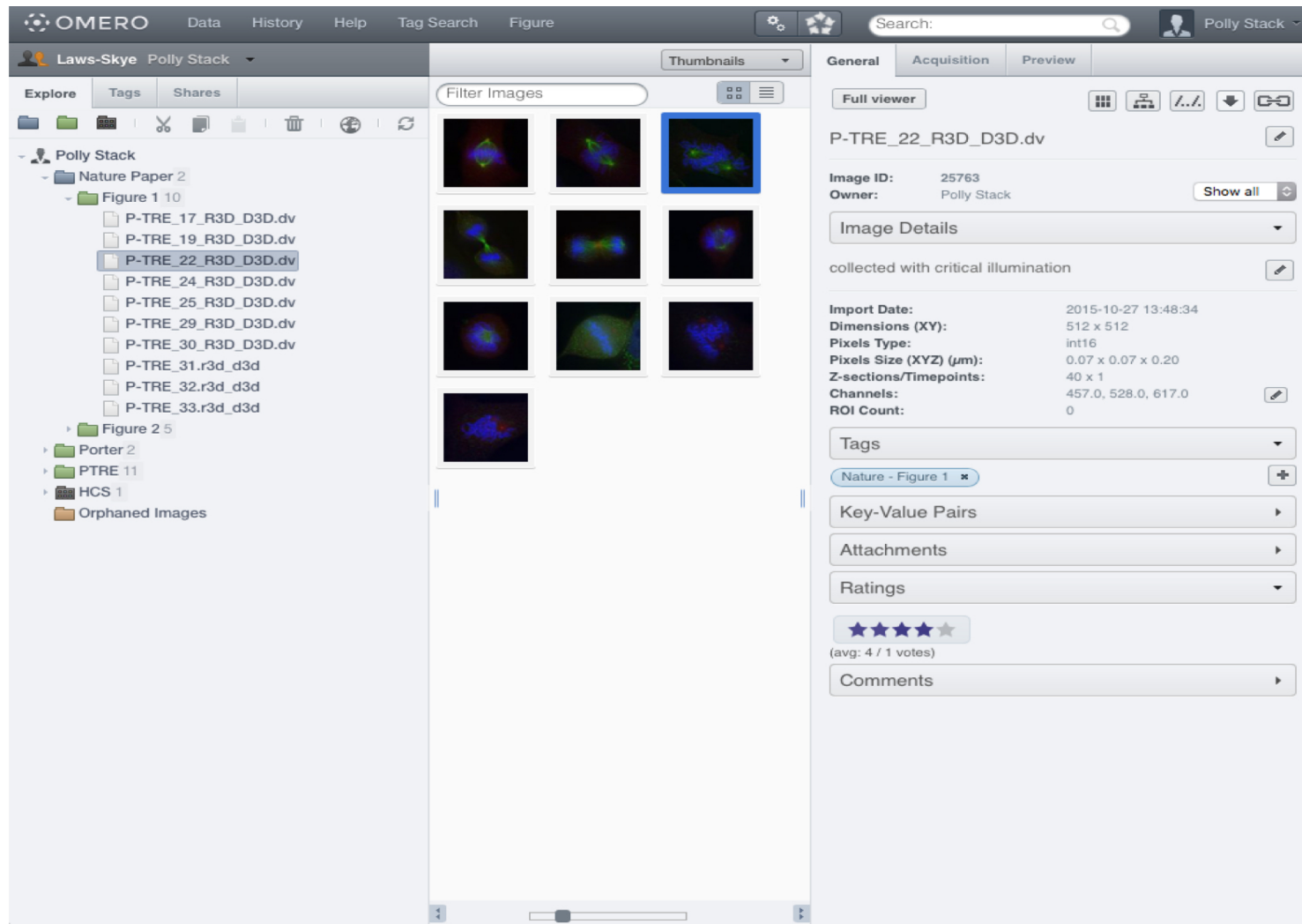
<http://help.openmicroscopy.org/viewing-data.html>

# View – split channels and make Projections



<http://help.openmicroscopy.org/viewing-data.html>

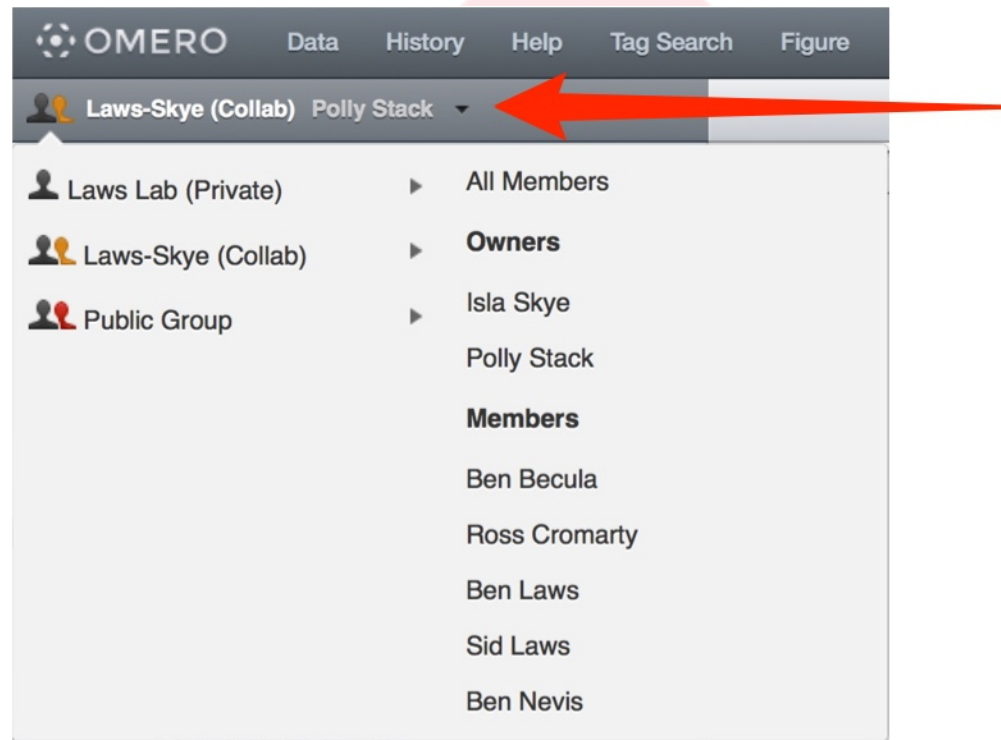
# OMERO.web – view your data using internet browser



<http://help.openmicroscopy.org/web-client.html>

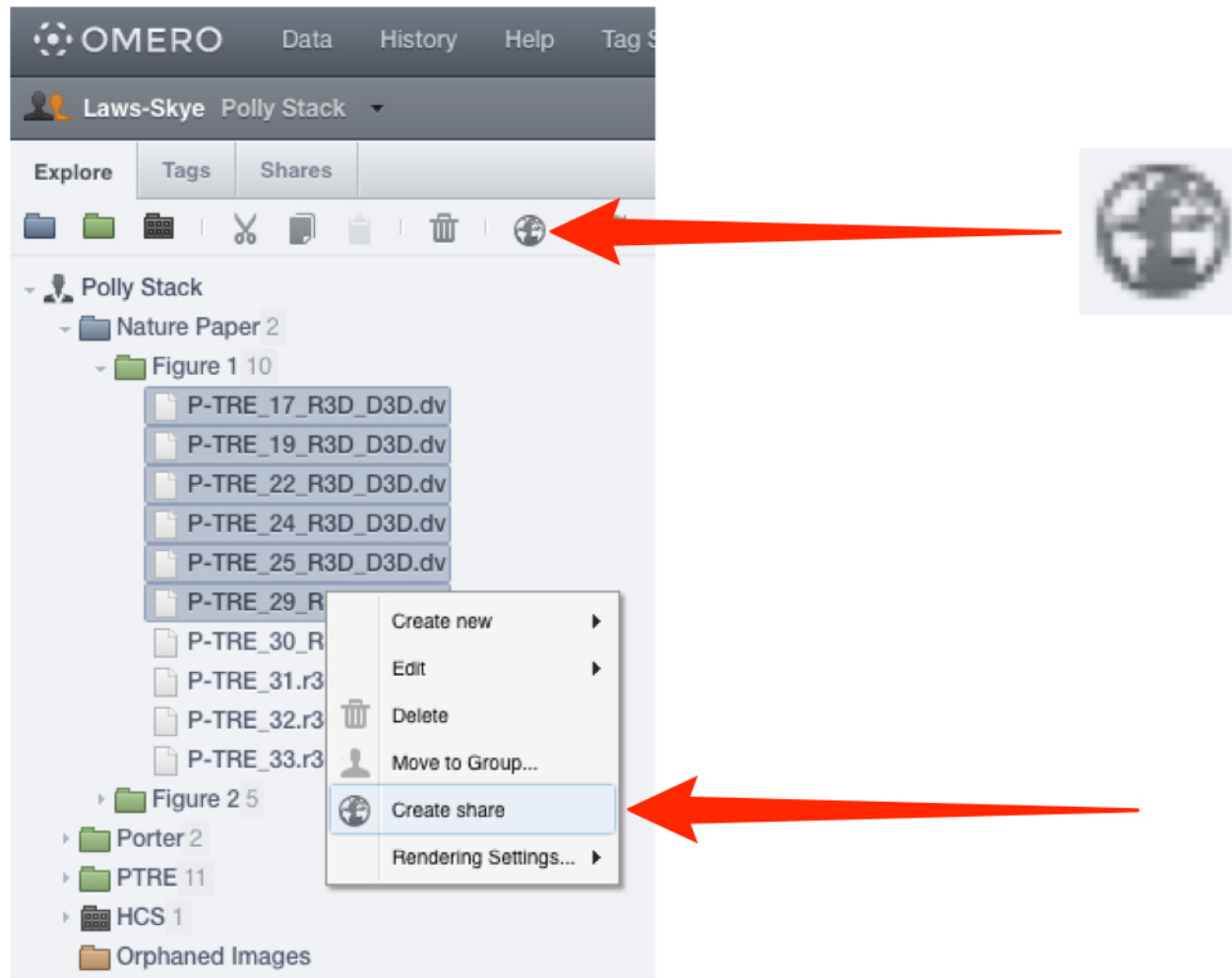


# Cooperate with your colleagues in OMERO



<http://help.openmicroscopy.org/web-client.html>

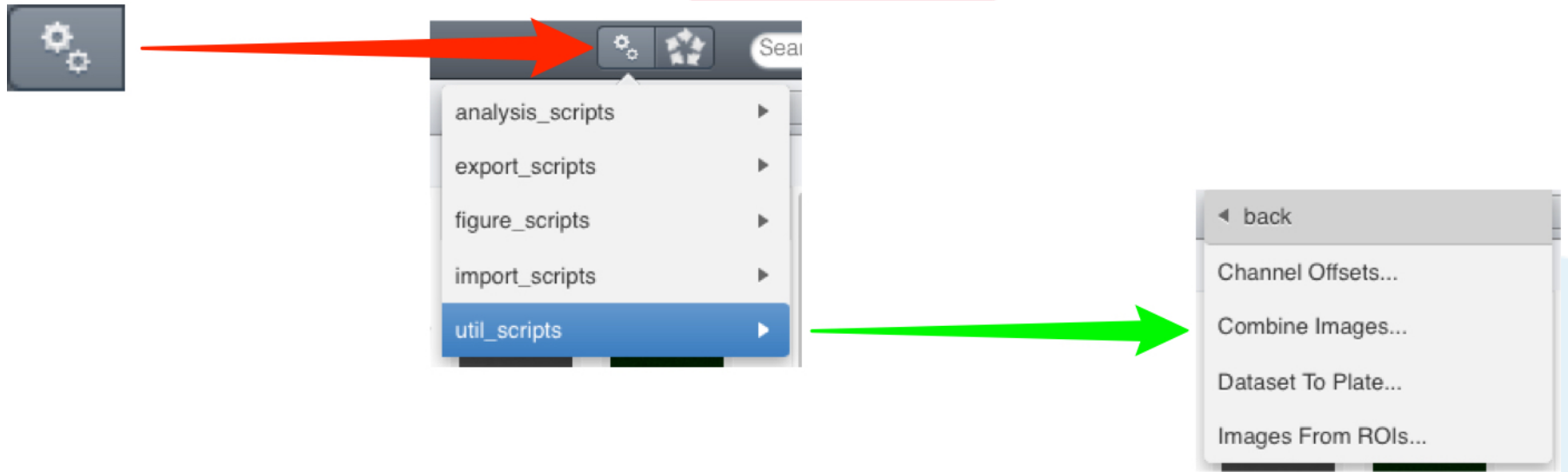
# Share your images with other users in OMERO



<http://help.openmicroscopy.org/web-client.html>

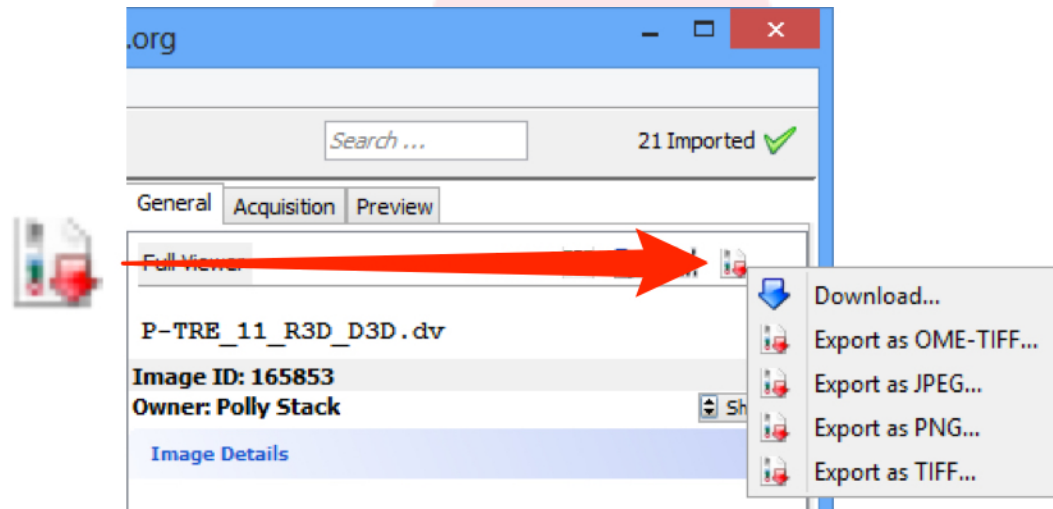


# Use OMERO scripts for analysis



<http://help.openmicroscopy.org/scripts.html>

# Export a set of images from OMERO



<http://help.openmicroscopy.org/export.html>

# Use OMERO.webtagging to create tags from your image and filenames

The top screenshot shows the OMERO web interface with the 'Show All Potential Tags' checkbox checked. A red arrow points to this checkbox. The bottom screenshot shows the resulting tags and a 'Rarity Threshold' slider. A green arrow points from the top screenshot to the bottom one.

**Top Screenshot: OMERO Web Interface**

OMERO Data History Help Tag Search Figure

Search: Polly Stack

Explore Tags Shares

Law-Skye Polly Stack

Nature Paper 2

Figure 1 22

P-TRE\_10\_R3D\_D3D.dv  
P-TRE\_10\_R3D\_D3D.dv\_vol  
P-TRE\_11\_R3D\_D3D.dv  
P-TRE\_12\_R3D\_D3D.dv  
P-TRE\_13\_R3D\_D3D.dv  
P-TRE\_14\_R3D\_D3D.dv  
P-TRE\_15\_R3D\_D3D.dv  
P-TRE\_16\_R3D\_D3D.dv  
P-TRE\_17\_R3D\_D3D.dv  
P-TRE\_18\_R3D\_D3D.dv

Auto Tag

Show All Potential Tags ☒

Original Import Path

Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_10\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_10\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_11\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_12\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_13\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_14\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_15\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_16\_R3D\_D3D.dv

Figure 1

Dataset ID: 3052  
Owner: Polly Stack

Dataset Details

Add Description

Creation Date: 2015-10-26 13:55:05

Tags

Key-Value Pairs

Attachments

**Bottom Screenshot: OMERO Web Interface**

OMERO Data History Help Tag Search Figure

Search: Polly Stack

Explore Tags Shares

Law-Skye Polly Stack

Nature Paper 2

Figure 1 22

P-TRE\_10\_R3D\_D3D.dv  
P-TRE\_10\_R3D\_D3D.dv\_vol  
P-TRE\_11\_R3D\_D3D.dv  
P-TRE\_12\_R3D\_D3D.dv  
P-TRE\_13\_R3D\_D3D.dv  
P-TRE\_14\_R3D\_D3D.dv  
P-TRE\_15\_R3D\_D3D.dv  
P-TRE\_16\_R3D\_D3D.dv  
P-TRE\_17\_R3D\_D3D.dv  
P-TRE\_18\_R3D\_D3D.dv

Auto Tag

Rarity Threshold 2

Show All Potential Tags ☒ Apply Refresh

P-TRE R3D D3D dv W. r3d d3d test

D3D (38651) Nature - Figure 1 (33851)

Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_10\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_10\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_11\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_12\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_13\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_14\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_15\_R3D\_D3D.dv  
Users/gus/Documents/1 OME/4 Data/Data from Jason/PTRE/P-TRE\_16\_R3D\_D3D.dv

Figure 1

Dataset ID: 3052  
Owner: Polly Stack

Dataset Details

Add Description

Creation Date: 2015-10-26 13:55:05

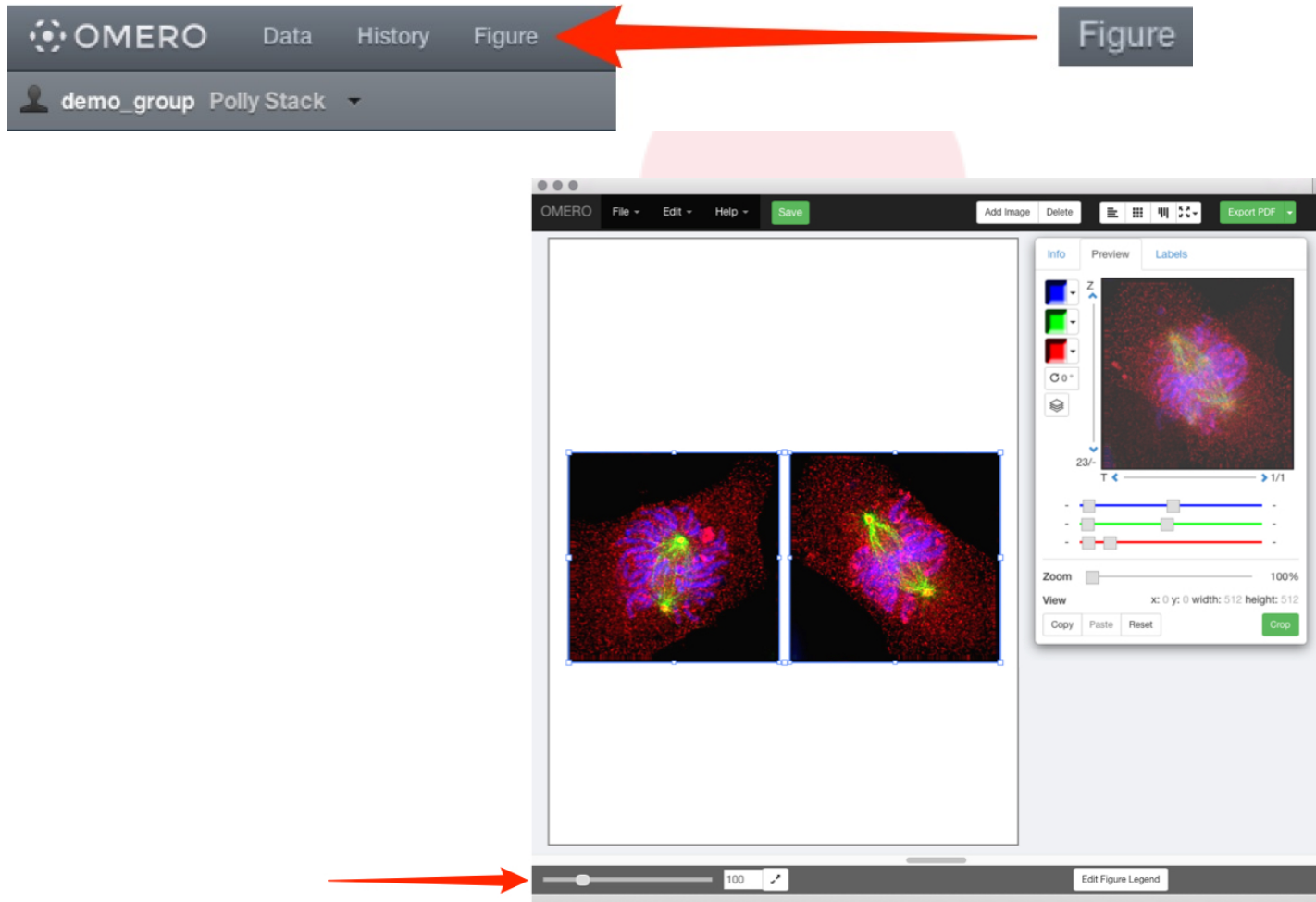
Tags

Key-Value Pairs

Attachments

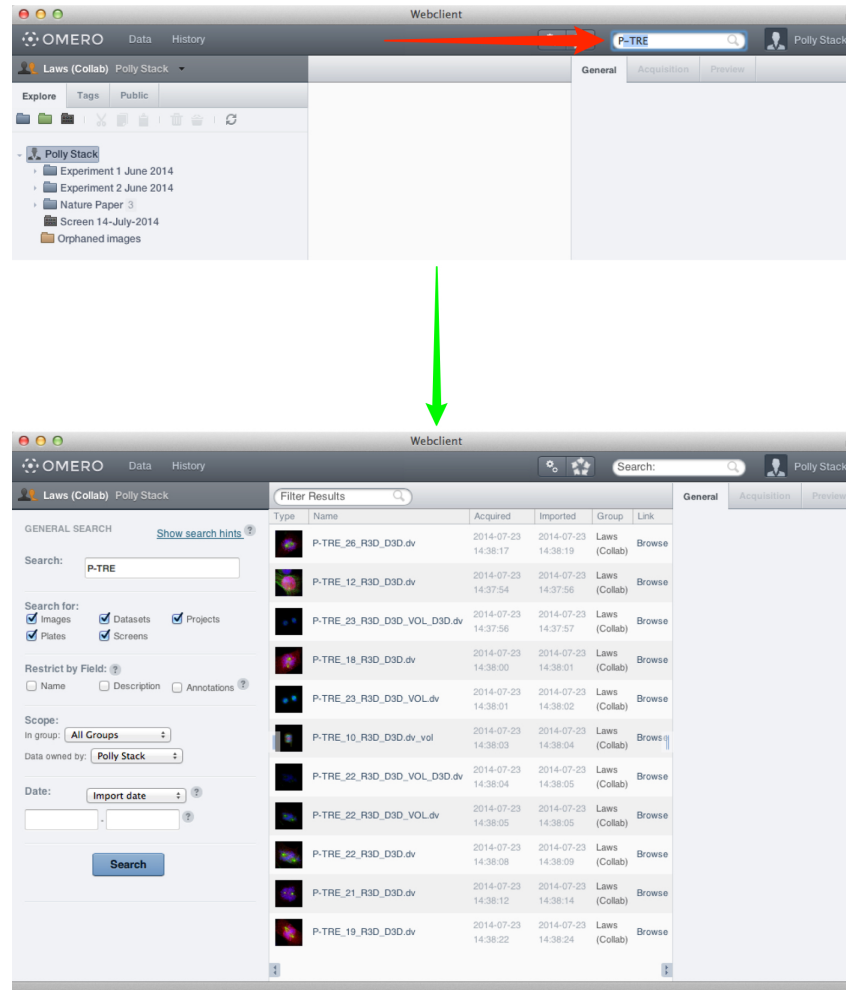
<http://help.openmicroscopy.org/web-tagging.html>

# Use OMERO.figure to quickly and interactively design your publication outputs



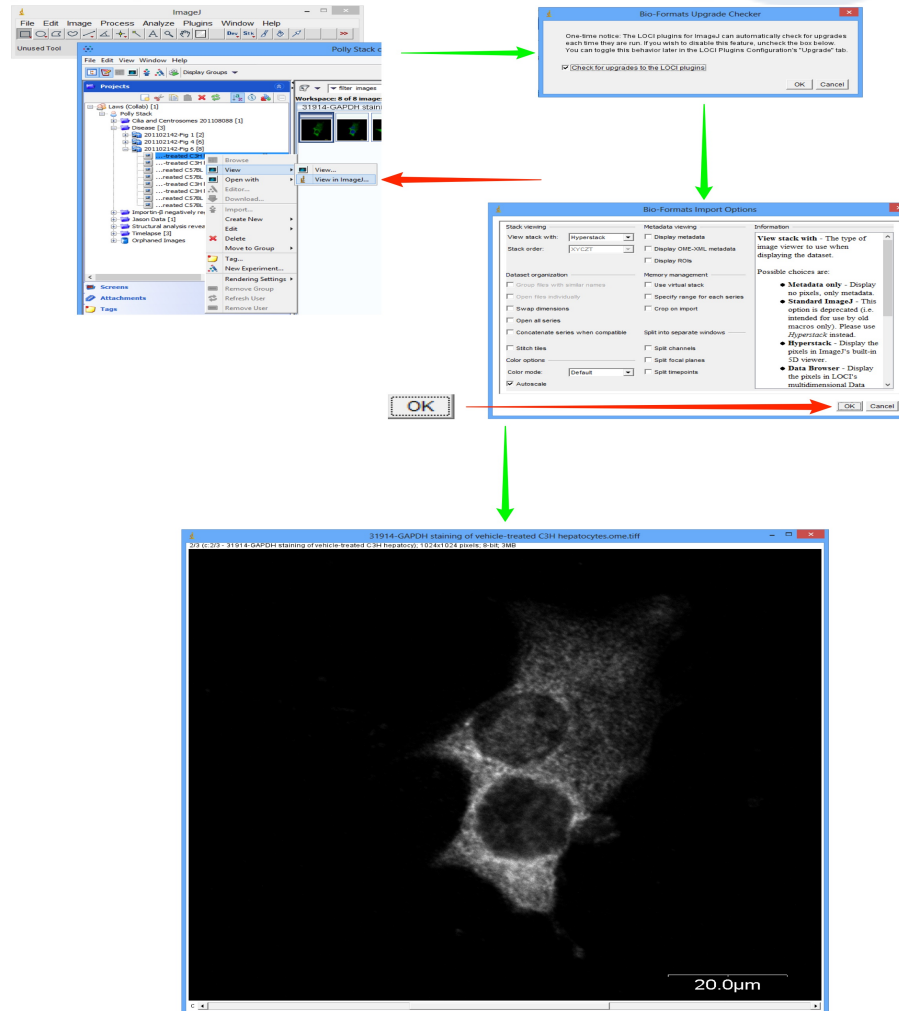
<http://help.openmicroscopy.org/figure.html>

# Do advanced searches through your OMERO data and metadata



<http://help.openmicroscopy.org/search.html>

# Analyze your OMERO images using Fiji



<http://help.openmicroscopy.org/imagej.html>