Using OMERO
Workshop walkthrough
Dundee, 2017

Petr Walczysko, Balaji Ramalingam, William Moore
University of Dundee
The OME Consortium
Outline

- Scientific workflow
- Image Data Organization with OMERO
- View data (New features in viewing (histogram, LUTs, iviewer, FPBioimage))
- Image Data Annotation with OMERO
- Drawing ROIs for analysis – new OMERO.iviewer
- Example of ImageJ for analysis
- Publishing with OMERO (OMERO.figure)
Image Data Organization with OMERO
Viewing Images – LUTs, Histogram
New “Open With” feature
Viewing Images – OMERO.iviewer
Drawing ROIs – OMERO.iviewer
First Person Bioimage – 3D viewer from Cambridge, now in OMERO.web

© Marcus Fantham
See the paper in Nature Photonics

Images generated in OMERO.
Image Data Annotation with OMERO
Image Data Analysis with OMERO

Analysis Within OMERO

3rd Party Integrations

Image Processing

Data Processing

Image and Data Processing
Image Data Analysis within OMERO
Batch Image Operations with OMERO

Batch Image Export...
Image Data Analysis with OMERO
Analysis Within OMERO

OMERO.web

OMERO.scripts

3rd Party Integrations

Image Processing

Data Processing

Image and Data Processing

Python

R

Java
Fiji-OMERO Workflow Outline

- Setup OMEROIJ Plugin
- Manual Workflow:

  1. OMERO Images
  2. Opened in Fiji
  3. Segmentation using Fiji
  4. ROI’s and Results sent back to OMERO
ImageJ/Fiji and OMERO

http://help.openmicroscopy.org/imagej.html
Publishing with OMERO
OMERO.figure – ROIs from OMERO visible

Will Moore, Dundee  (Google: “OMERO figure”)