

Plan

⇔ OME

Metadata

Image Data Management

David Pinto

Micron Oxford Advanced BioImaging Unit (the basement)

Micron Advanced Microscopy Course, 2016



Plan

OME

ivietada

Microscope Image Analysis in 3 parts

- 1 What is in a microscope image
 - What is in a image?
 - Image display
 - ImageJ
 - Image acquisition
- 2 Images as N dimensional numeric arrays
 - N dimensional images
 - Spatial filters
 - Morphology
 - Connected components
- 3 Don't botch your data
 - File formats
 - Data storage
 - OMERO



Open Microscopy Environment

€ OME

- bioformats
- OMERO
- OME-XML
- OME-TIFF



Files and metadata

OME

- why some many formats?
- metadata saved may be format dependent
- use libraries and applications that respect you



Bioformats and OME-TIFF

OME

HOW STANDARDS PROLIFERATE: (SEE: A/C CHARGERS, CHARACTER ENCODINGS, INSTANT MESSAGING, ETC.)

SITUATION: THERE ARE 14 COMPETING STANDARDS. IH?! RIDICULOUS!
WE NEED TO DEVELOP
ONE UNIVERSAL STANDARD
THAT COVERS EVERYONE'S
USE CASES.

YEAH!

500N:

SITUATION: THERE ARE 15 COMPETING STANDARDS.