

Zegami Unmeeting

OME Users Meeting, Dundee 2016

Steve Taylor went through a brief presentation discussing the origins and uses of Zegami in academia and industry, see ([Unmeeting Presentation](#)). It was pointed out although Zegami is a not open source the command line version is free to academics. There is also a fully supported academic version and a commercial version.

What do people in the meeting potentially want to use Zegami for:

Histopathology, Zegami could read data like OpenSlide (whole slide imaging / format reader). Also Whole Slide Imaging, High Content Screening and reviewing images in lab meetings.

What size of collections

- Images - up to 20k fine for most applications
- Metadata - Can be very large.

Uses

- Annotation - in pathology and teaching
- Machine Learning - histopathology

Suggested plugins using Zegami's API (see the [API Section](#) for docs)

- Heatmap viewer
- Plate viewer

Other Comments

- Allowing Zegami to connect to OMERO/IDR would be very useful.
- Image analysis pipeline tools - write a blog, and show examples how ST did image processing using Fiji and ImageMagick and built the collection in Zegami. This will show people how easy it is to add metadata in to facilitate analysis.
- Do a proof of concept to show Zegami using a single level thumbnail as a low level representation of the image (for example in a HCS) and then use the dashboard to go to a larger image (e.g. in OMERO).
- More use case videos should be posted up on the web site.

Demos

An example of a pipeline created using ImageJ with the JACoP plugin looking at ATRX colocalisation data and Boxplot viewer:

http://zegami.molbiol.ox.ac.uk/collections/TRF2_53BP1_1/

An example of a University of Oxford's Plant Science collection showing a demonstration of the scatterplot functionality using RGB values from ImageMagick:

<http://zegami.molbiol.ox.ac.uk/collections/BP2/>

An example of dumping out data from the ImageJ's "Find Particles" functionality to rapidly investigate the parameter space when trying to isolate single strands of DNA to be used in [optical mapping](#) analysis:

<http://zegami.molbiol.ox.ac.uk/collections/dna2/>

An example of a large museum collection of insects highlighting an RGB Histogram method of searching for similar images

<http://demo.zegami.com/SATerrestrialInvertebrate.html>

More demos are available at <http://demo.zegami.com/>.