Web-based display of 3D data with the Interactive Embryo Viewer (IEV)

OMERO User Meeting, Dundee, Scotland

May 31st 2016

Henrik Westerberg, Team Leader, Systems Imaging Group
James Brown
Neil Horner
Jennifer Vibert

Ann-Marie Mallon, BioComputing, MRC Harwell
Dissemination of 3D image data on the web
International Mouse Phenotyping Consortium (IMPC)
www.mousephenotype.org

We are building the first truly comprehensive, functional catalogue of a mammalian genome.
Bio-formats

2D

3D
MRC Harwell Mysql database defined directory structure

Volumetric Phenotype Viewer

Interactive Embryo Viewer
Interactive Embryo Viewer (IEV)

- Rapid and intuitive access into the data
- Developed in Javascript, 2D/3D support provided by XTK
- Integrate the display into OMERO
Annotations Mockup within IEV

- Links regions of interest to ontologies (EMAP-PATO)
- Found through a high throughput image analysis pipeline
New: 3D mode released to live

http://www.mousephenotype.org/embryoviewer/?gene_symbol=Klf7&v=3d