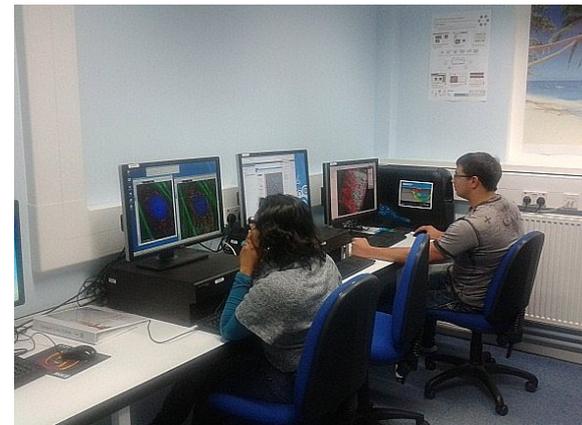
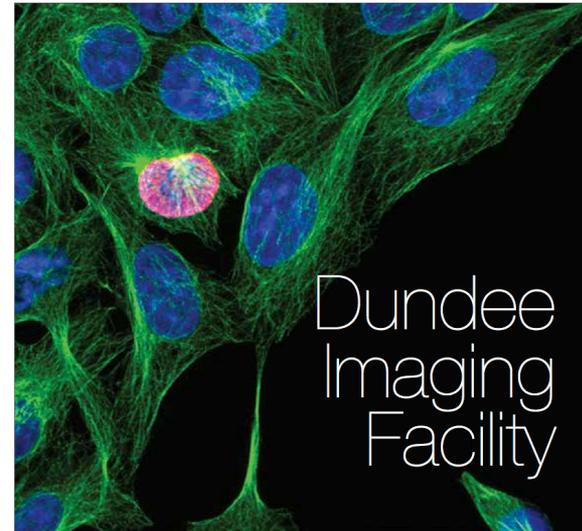


# Graeme Ball, Dundee Imaging Facility

## Image Analyst



# 3 blades, non-interactive shell jobs

3 Dell Poweredge FC630, each with:

- 32 cores (Xeon)
- 384 GB RAM
- 10GbE link to network storage



headless shell-executable jobs:

- Priism ER deconvolution
- Priism ND-SAFIR denoising
- Fiji grid/collection stitching

```
2. bash
$ pwd
/tmp/root_2016-05-26_12-22-00
gball@ts29501 /tmp/root_2016-05-26_12-22-00
$ cat BPARE_514_001_ID16_ERD.com
#!/bin/sh
#Setting run time environment...
. '/Users/gball/build/priism-4.2.9/Priism_setup.sh';
#command file for core2_decon
( time core2_decon \
  "/tmp/root_2016-05-26_12-22-00/BPARE_514_001_ID16.dv" \
  "/tmp/root_2016-05-26_12-22-00/BPARE_514_001_ID16_ERD.dv" \
  "/Users/gball/Documents/TestData/Deconvolution/otf/Olympus_60X_142_10612.otf" \
  -alpha=5000 -lamratio=0:1 -lamf=0.5 -lampc=100 \
  -lampos=1 -lamsmooth=100 -cuth=0.001 -na=1.4 -nimm=1.512 -ncycl=25 \
  -nzpad=64 -omega=0.8 -sub=1:1:1:1 -tol=0.0001 -np=4 -oplotfile="" ) \
>"/tmp/root_2016-05-26_12-22-00/BPARE_514_001_ID16_ERD.log" 2>&1
gball@ts29501 /tmp/root_2016-05-26_12-22-00
$ sh BPARE_514_001_ID16_ERD.com
```

# Image Processing via OMERO

The screenshot displays the OMERO webclient interface in a browser window. The address bar shows the URL `localhost:4080/webclient/`. The interface includes a navigation menu with options like Data, History, Admin, and JobCentre. A search bar and user profile (root root) are also visible.

The main content area is divided into three sections:

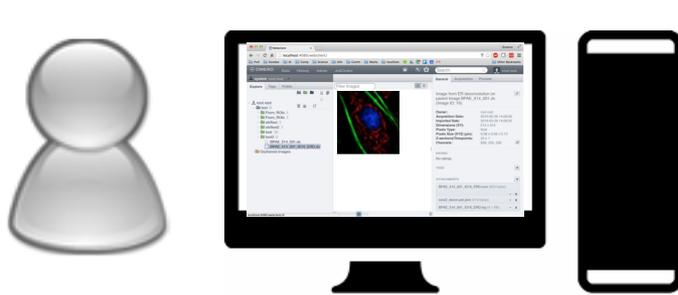
- Explore:** A tree view on the left showing a directory structure under 'root root'. The selected folder is 'test 2', which contains two files: 'BPAE\_514\_001.dv' and 'BPAE\_514\_001\_ID16\_ERD.dv'.
- Filter Images:** A central area with a search box and two image thumbnails. The right thumbnail is highlighted with a blue border.
- General:** A detailed view of the selected image, showing the following metadata:
  - Image from ER deconvolution on parent Image BPAE\_514\_001.dv (Image ID: 16)**
  - Owner:** root root
  - Acquisition Date:** 2016-05-26 14:08:20
  - Imported Date:** 2016-05-26 14:08:22
  - Dimensions (XY):** 512 x 512
  - Pixels Type:** float
  - Pixels Size (XYZ) ( $\mu\text{m}$ ):** 0.08 x 0.08 x 0.13
  - Z-sections/Timepoints:** 25 x 1
  - Channels:** 608, 435, 528

Below the metadata, there are sections for RATING (No ratings), TAGS, and ATTACHMENTS. The ATTACHMENTS section lists three files:

- BPAE\_514\_001\_ID16\_ERD.com (603 bytes)
- core2\_decon.job.json (410 bytes)
- BPAE\_514\_001\_ID16\_ERD.log (4.1 KB)

The browser's status bar at the bottom shows `localhost:4080/webclient/#`.

# Submit via shared FS; processor uploads



OMERO client



OMERO server

## Job manager:

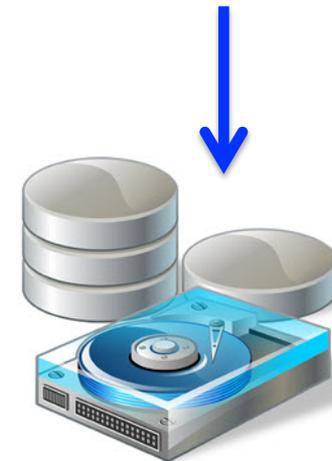
- poll FS
- queue
- run job
- upload results  
(session key)



node 1

node 2

node 1



Network share (FS)

