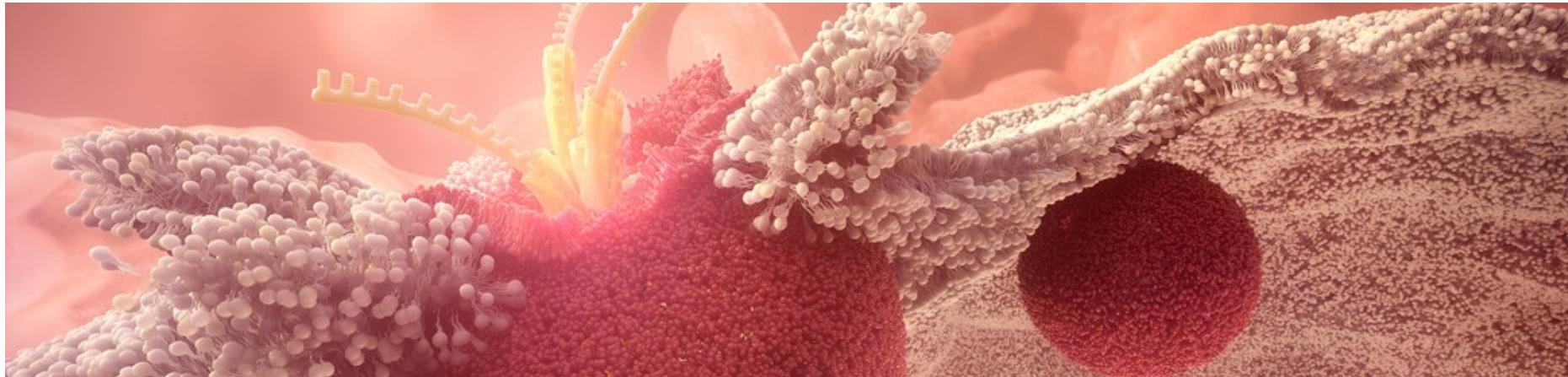


Hackathon adipocyte data set reference material



Data set file-name reference

File name: AssayPlate_Greiner_#655090_B02_T0001F001L01A01Z01C01

B02	well (row B, column 02)
T0001	timepoint (irrelevant for this dataset)
F001	field of view = site
L01	timeline (irrelevant for this dataset)
A01	action list number (3 fluorescent + 1 brightfield action)
Z01	3D z-number (slice number or vertical position)
C01	imaging channel (1 nuclear, 2 lipids, 3 cytoplasm, 4 brightfield)



Example images

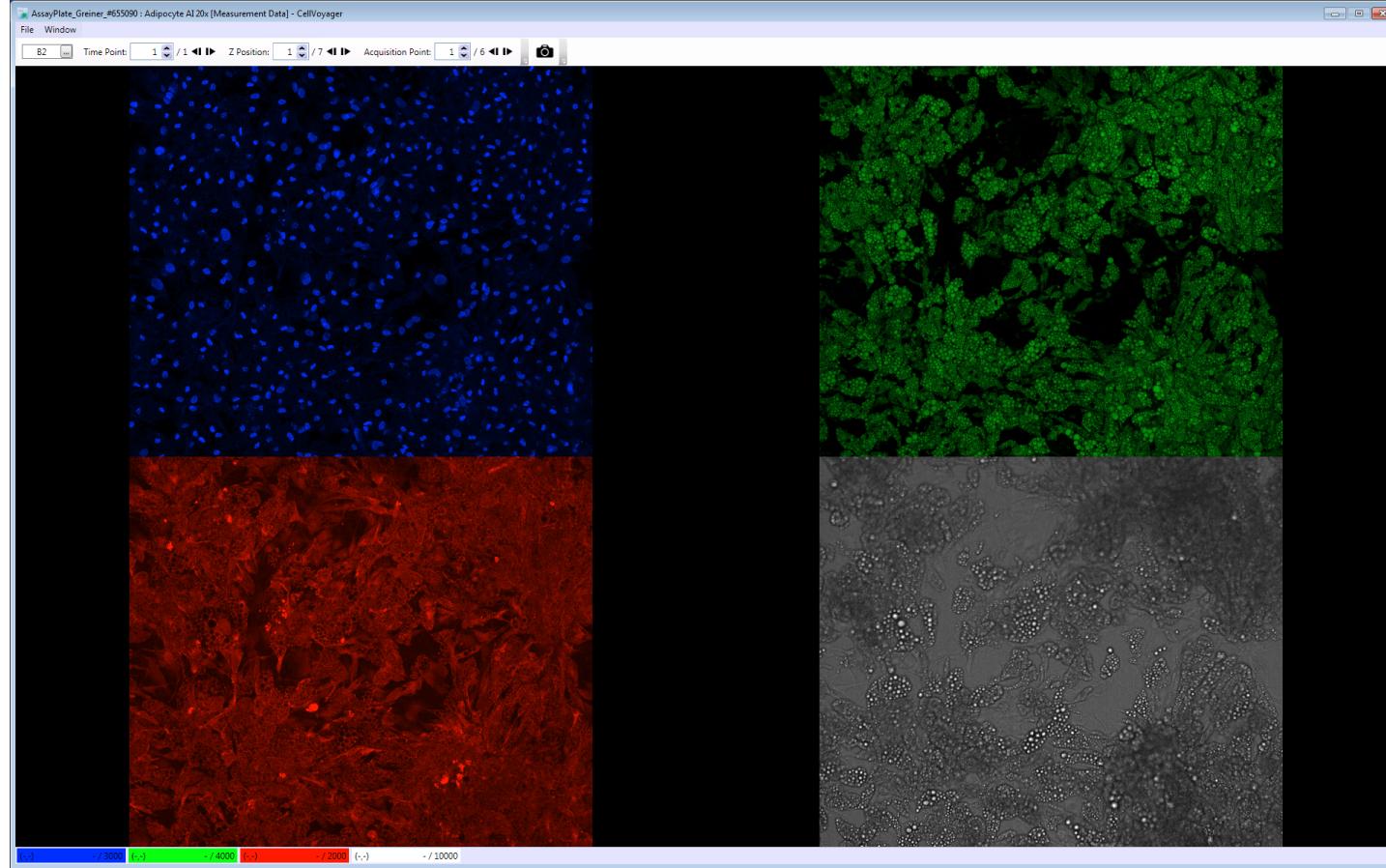
The following slides show sample images from 20, 40 and 60x imaging.

Contrast settings are the same for all channels and magnifications.

Each slide shows, in clockwise order: nuclei, lipids, brightfield, cytoplasm

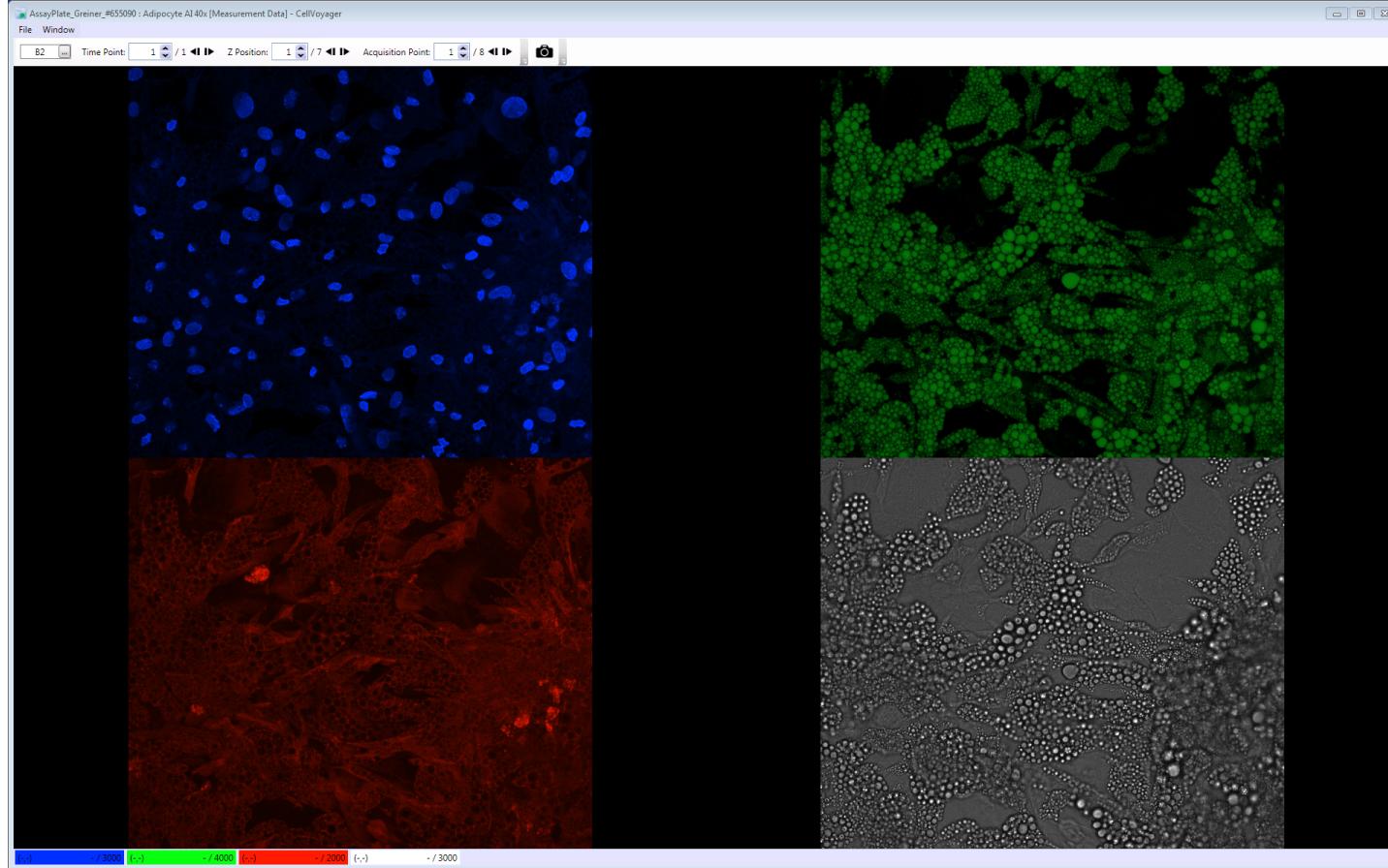
For this dataset the same 9 wells were imaged at all magnifications, but different sites (fields of view, FOVs) and different numbers of sites were imaged at each magnification. There is some site overlap between magnifications.





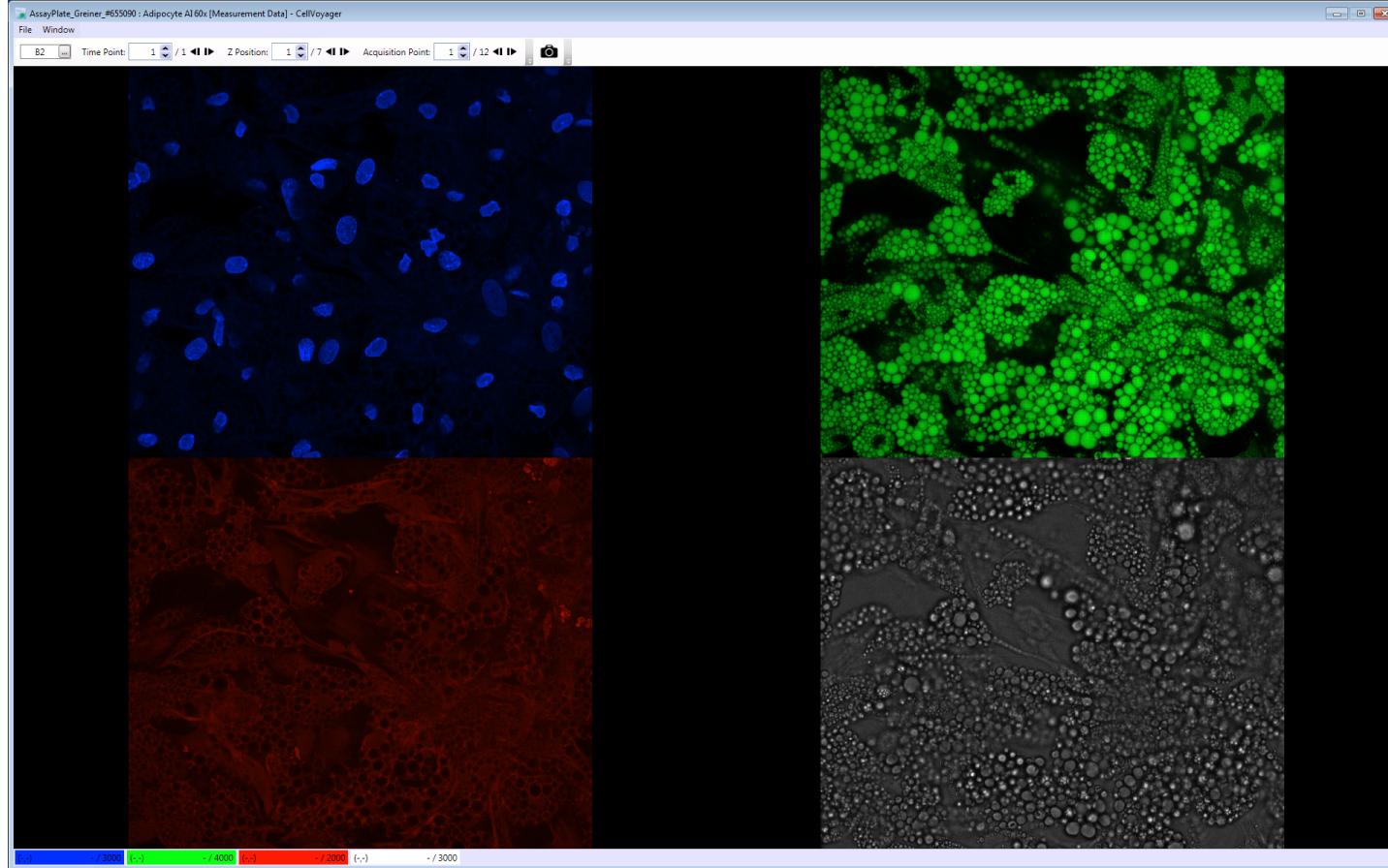
20x plane 1, clockwise: nuclei, lipids, brightfield, cytoplasm





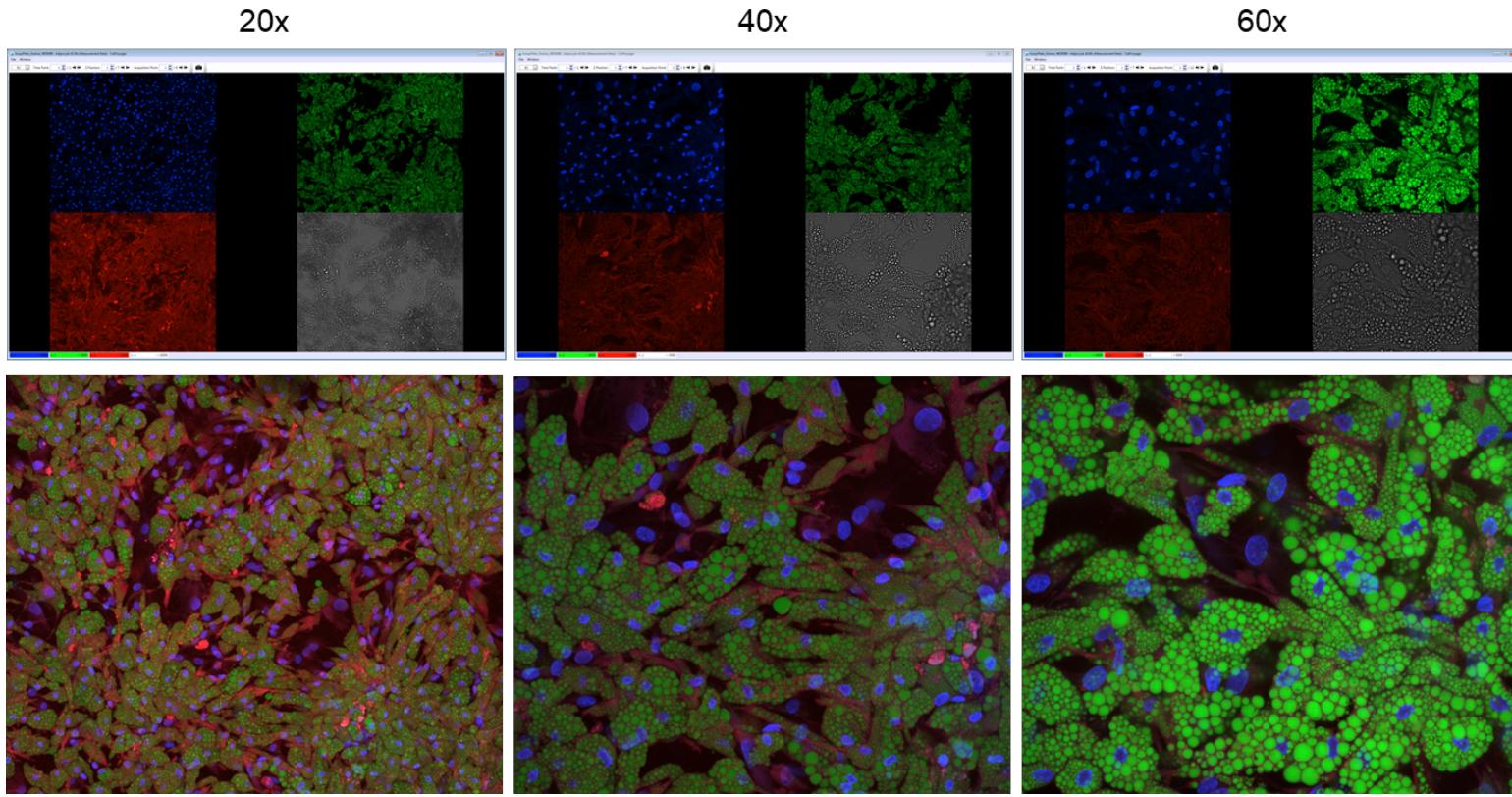
40x plane 1, clockwise: nuclei, lipids, brightfield, cytoplasm





60x plane 1, clockwise: nuclei, lipids, brightfield, cytoplasm



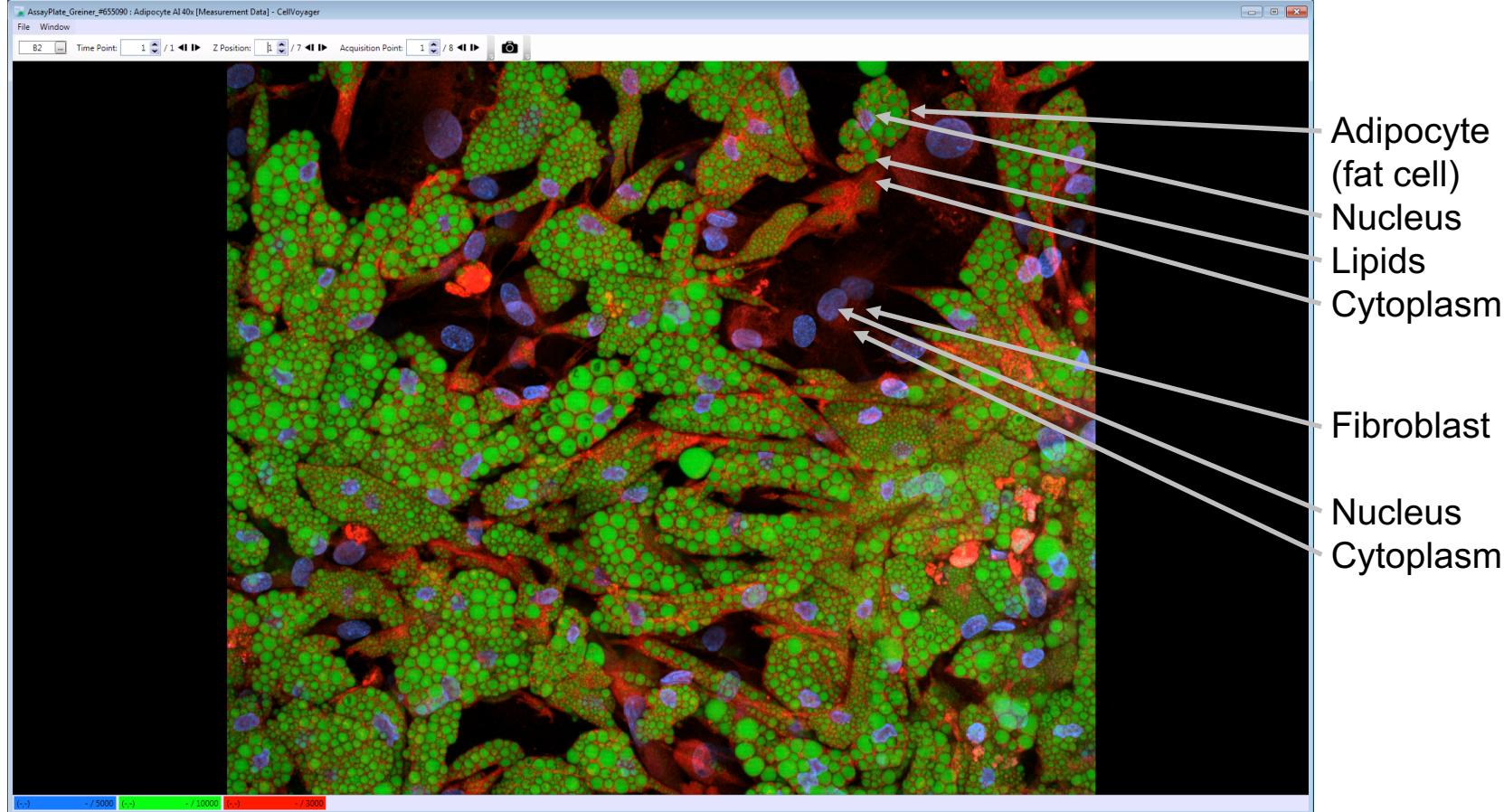


20, 40 and 60x (left to right) images from site one, well B2.

Here the three magnifications are shown together with the same contrast/brightness.

Upper panels show individual channels. Lower panels show an overlay of fluorescence channels (brightfield not shown).



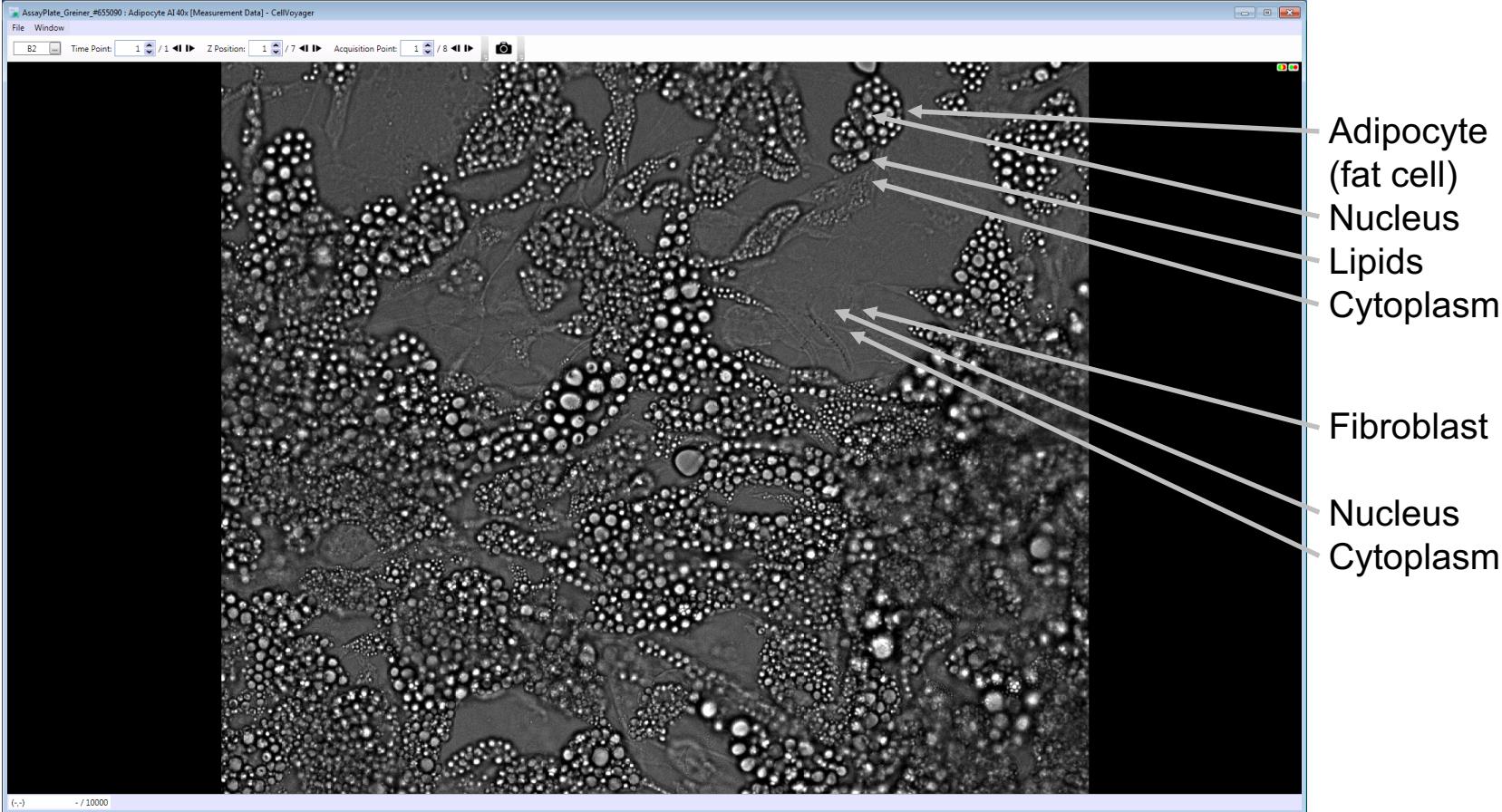


Representative maximum intensity projections of fluorescence channels, 40x.

Fibroblast-like cells are relatively flat and do not contain droplets.

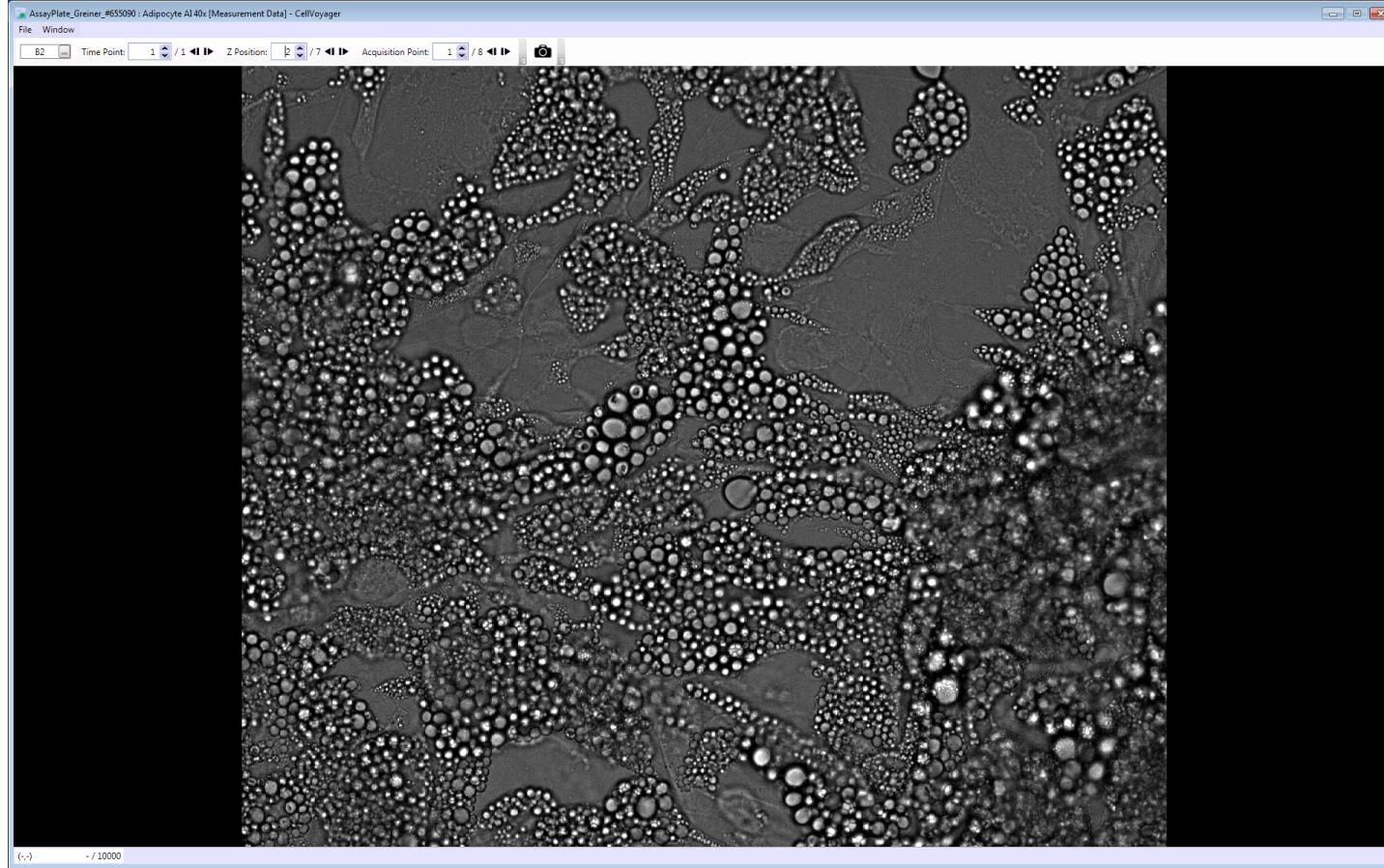
The following slides show representative brightfield images taken at 7 different z positions





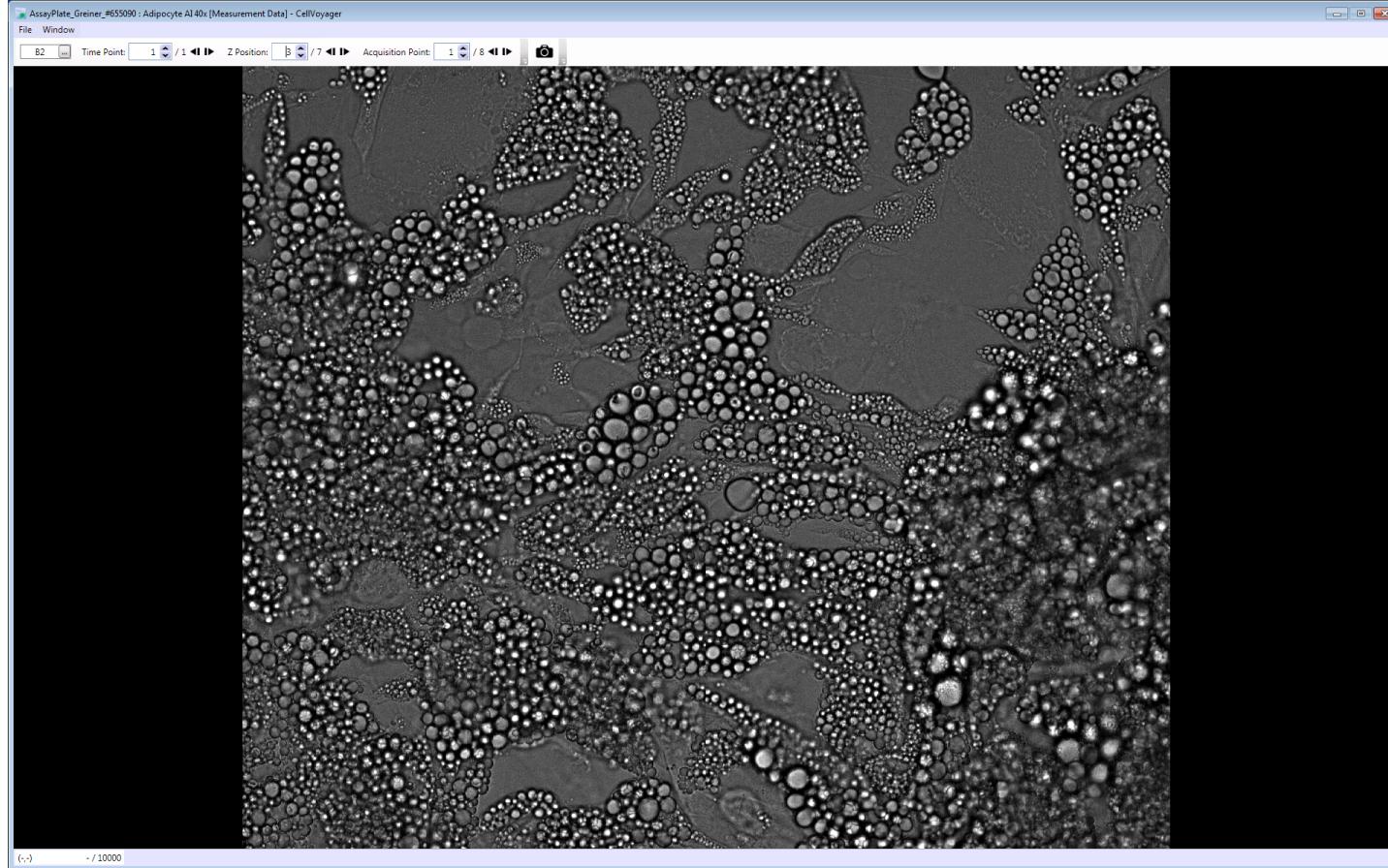
Z planes 1 um slices, slice 1





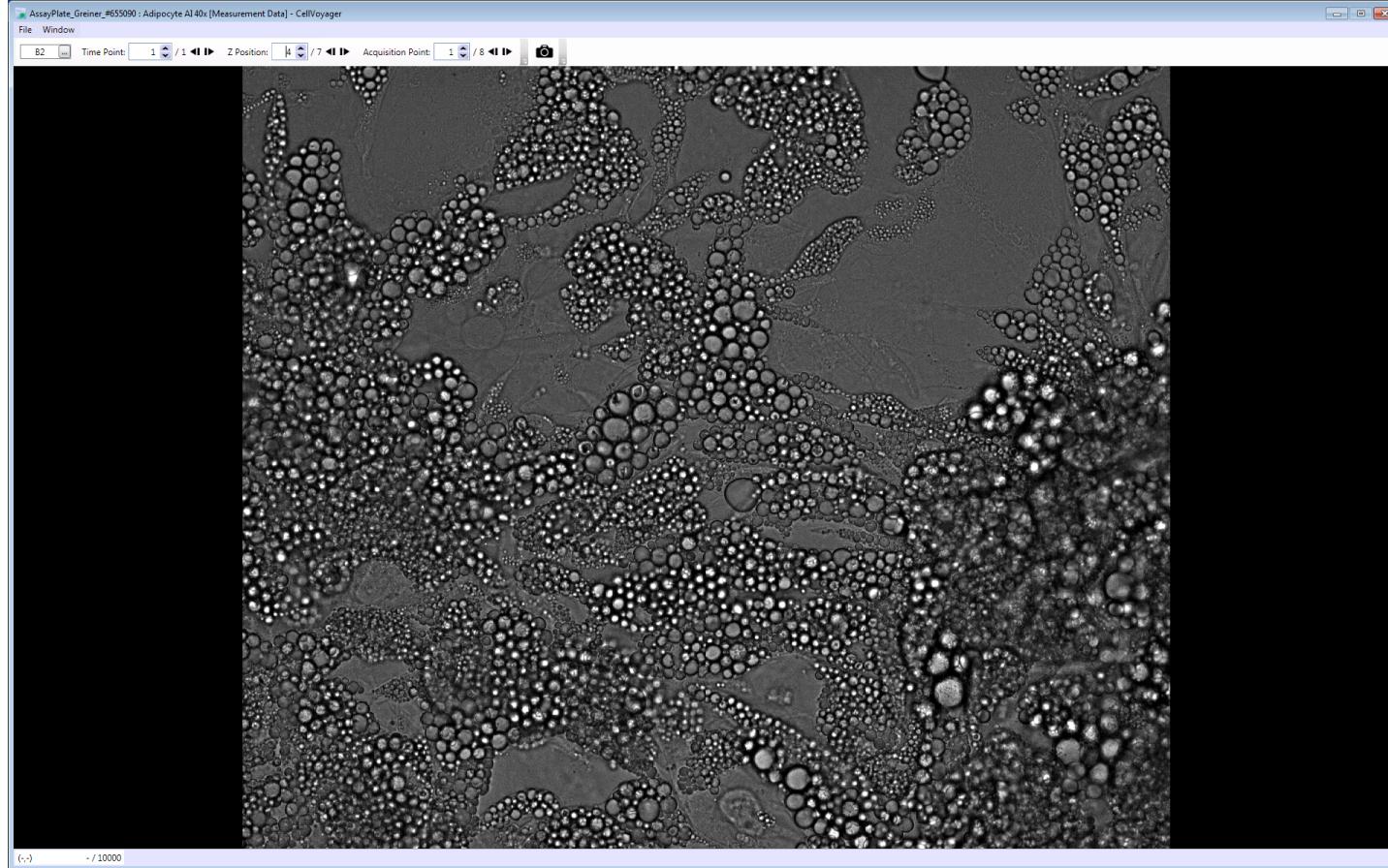
Z planes 1 um slices, slice 2





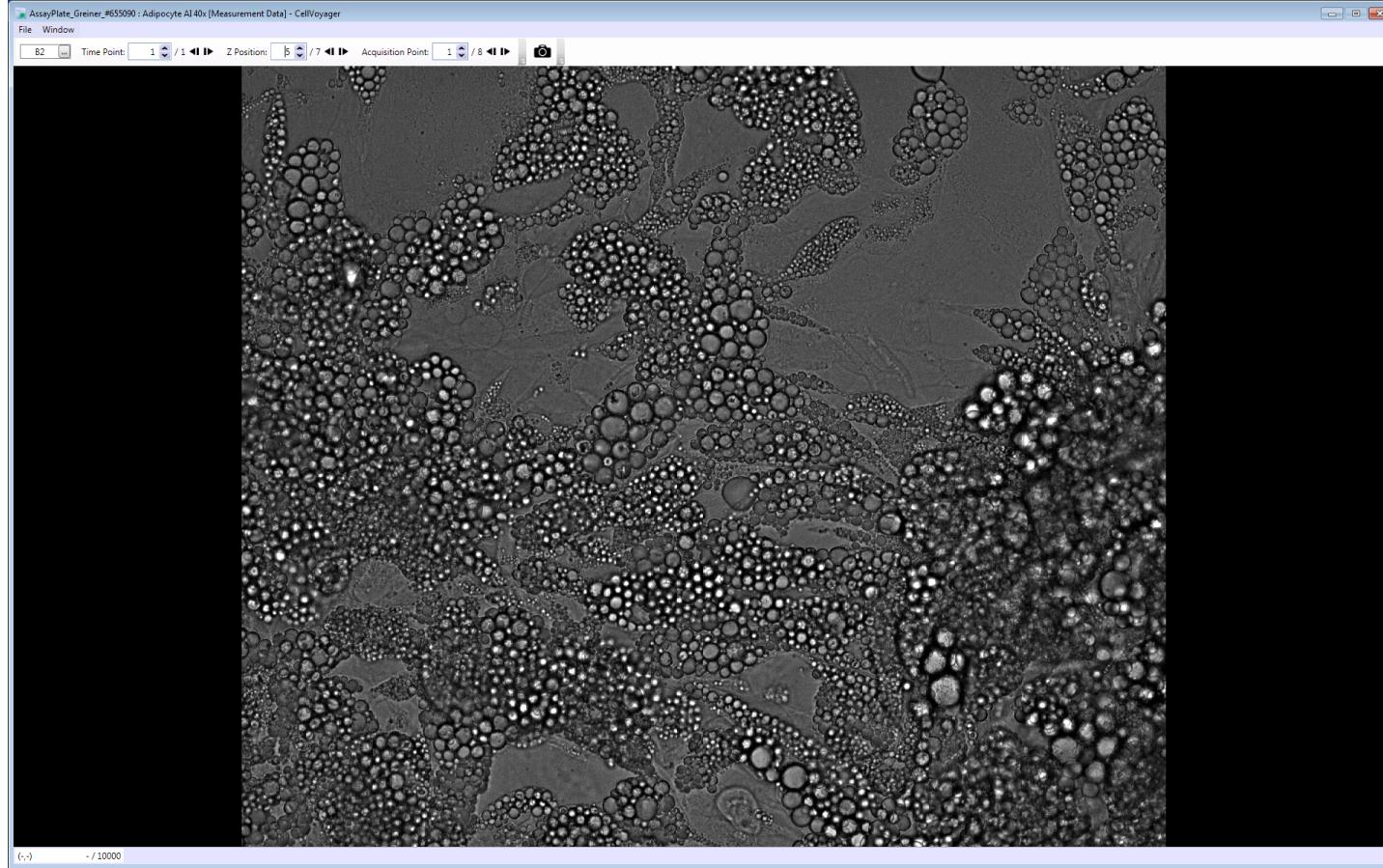
Z planes 1 um slices, slice 3





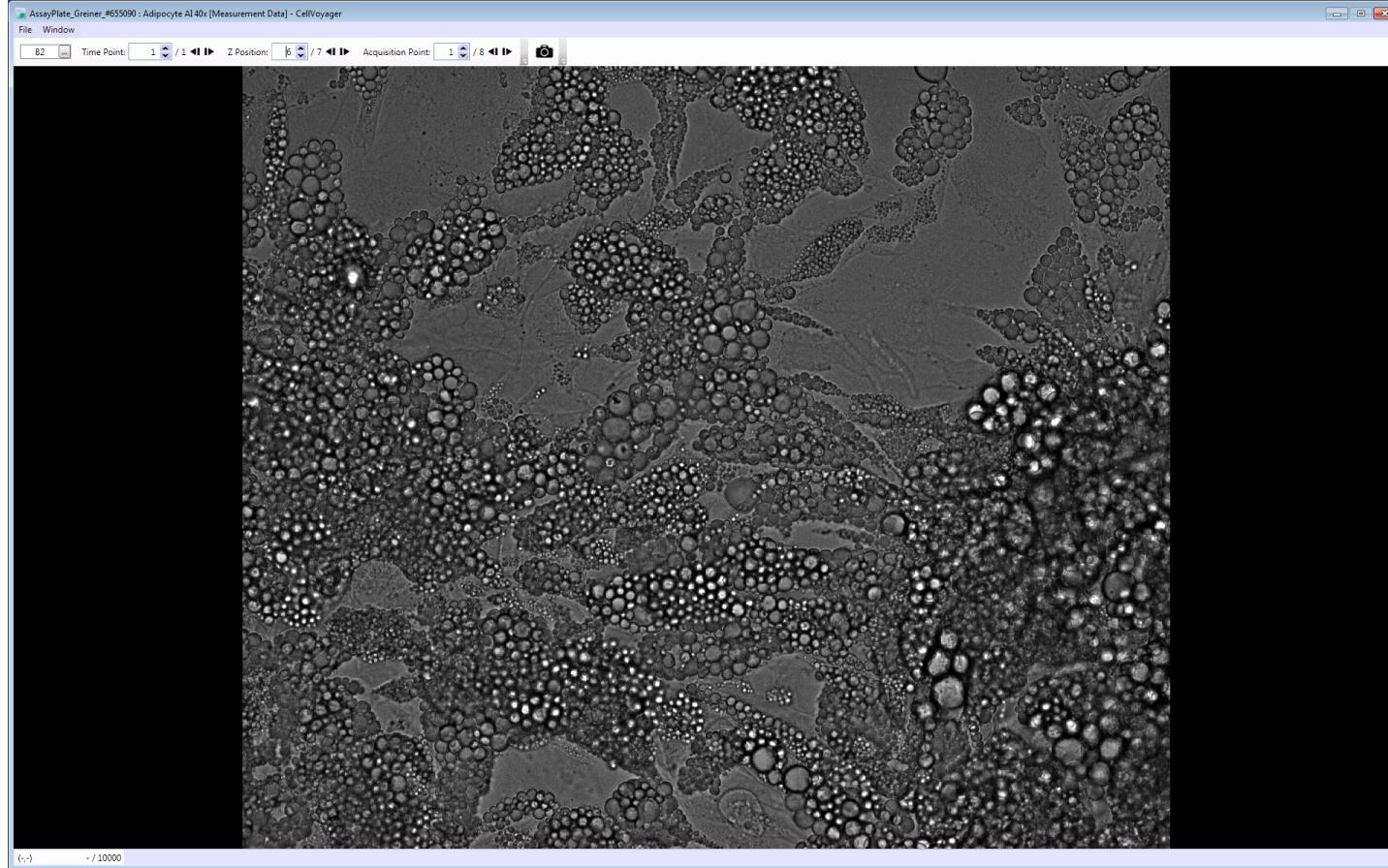
Z planes 1 um slices, slice 4





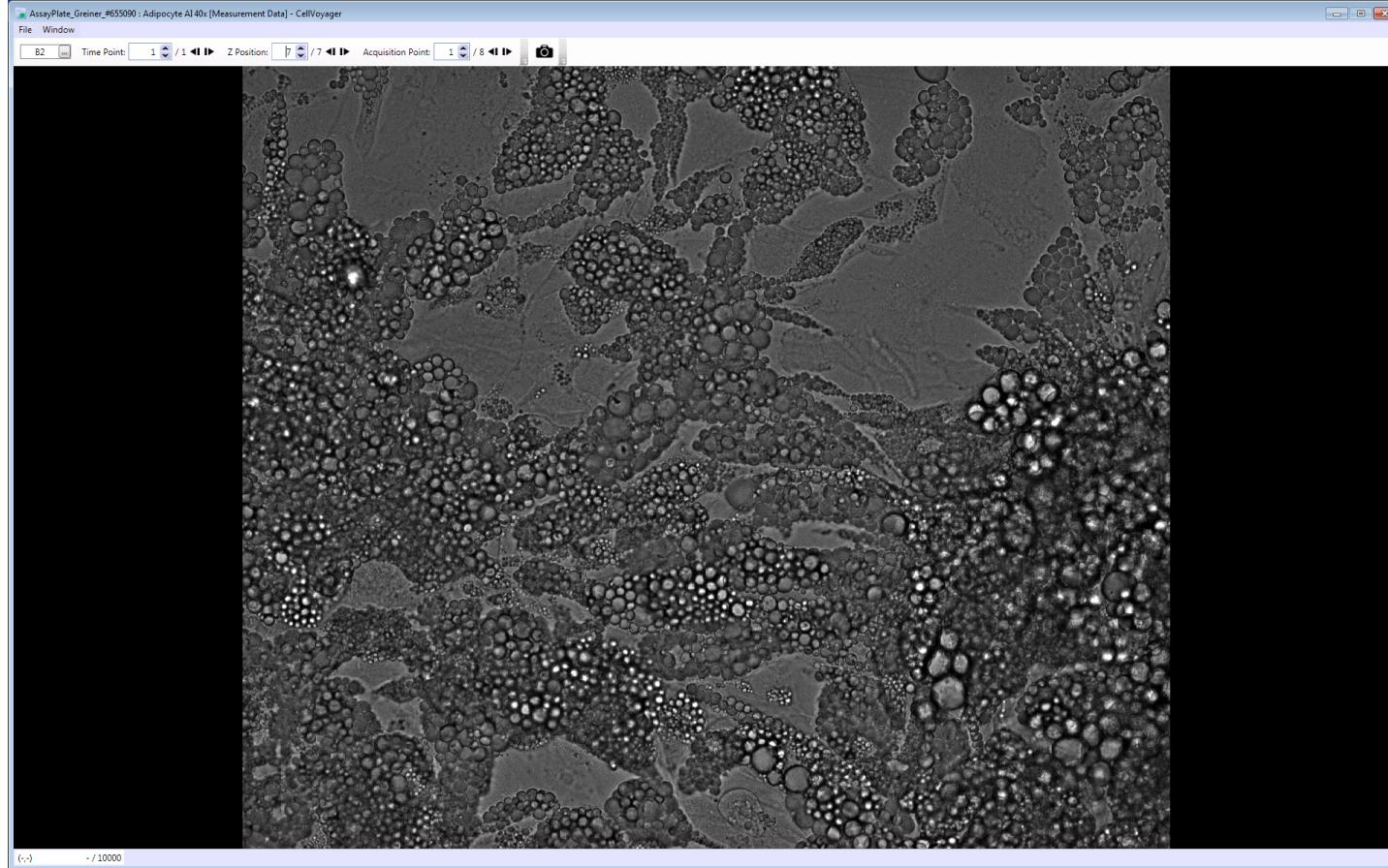
Z planes 1 um slices, slice 5





Z planes 1 um slices, slice 6

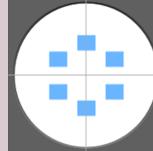




Z planes 1 um slices, slice 7



Additional detail regarding each magnification.

	20x	40x	60x
Wells	9	9	9
No. of image sites per well	6	8	12
Site orientation			
Z-planes brightfield	7	7	7
Slice interval, um	2	1	1
Stack depth, um	12	7	7
Pixel scale um/pixel	0.3250	0.1625	0.1083
Objective numerical aperture	0.75	0.95	1.2
Blue exposure, ms	250	300	300
Green exposure	100	200	300
Red exposure	500	500	500
Brightfield exposure	100	100	150

