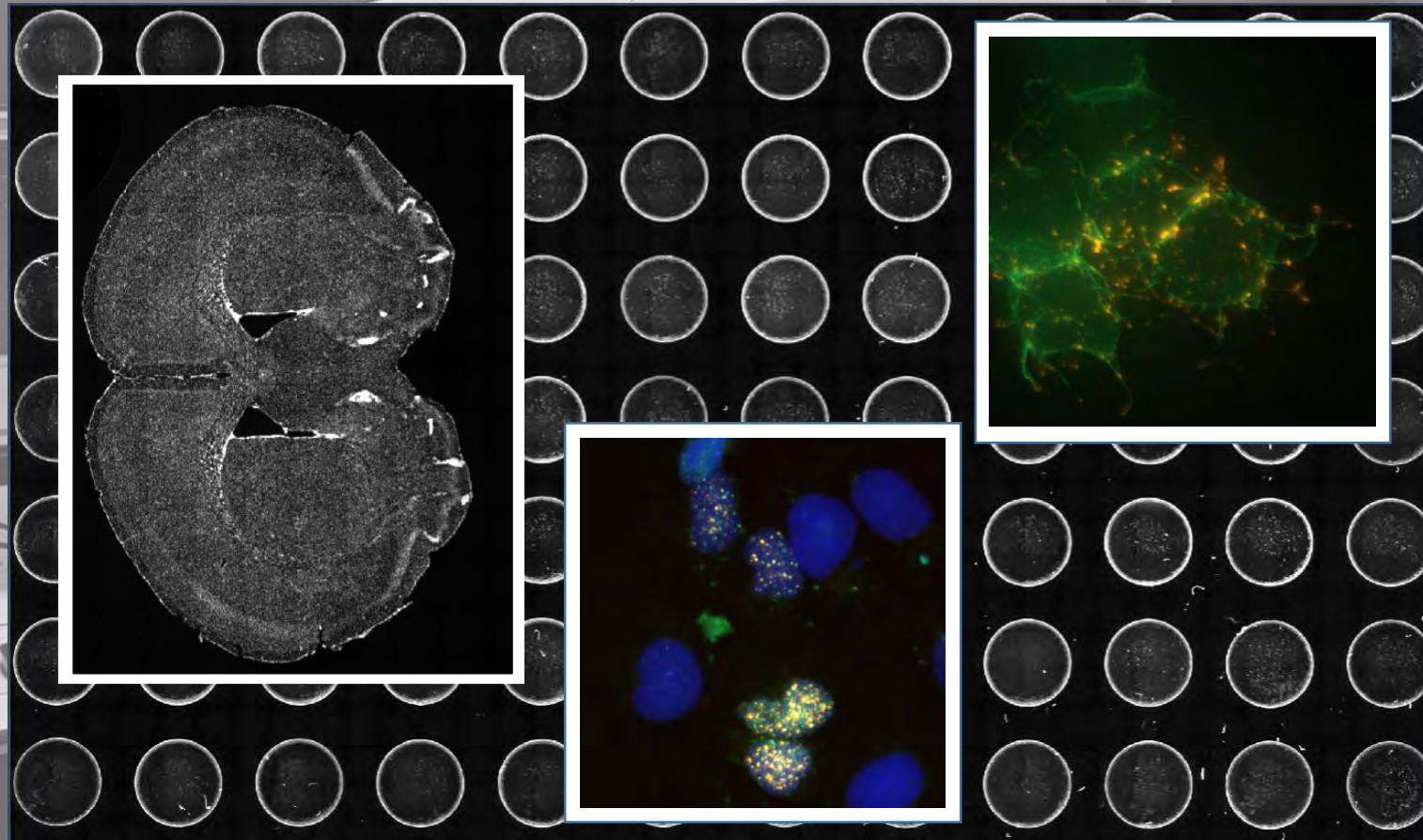


Cell Discoverer 7[®]



High Content Imaging System

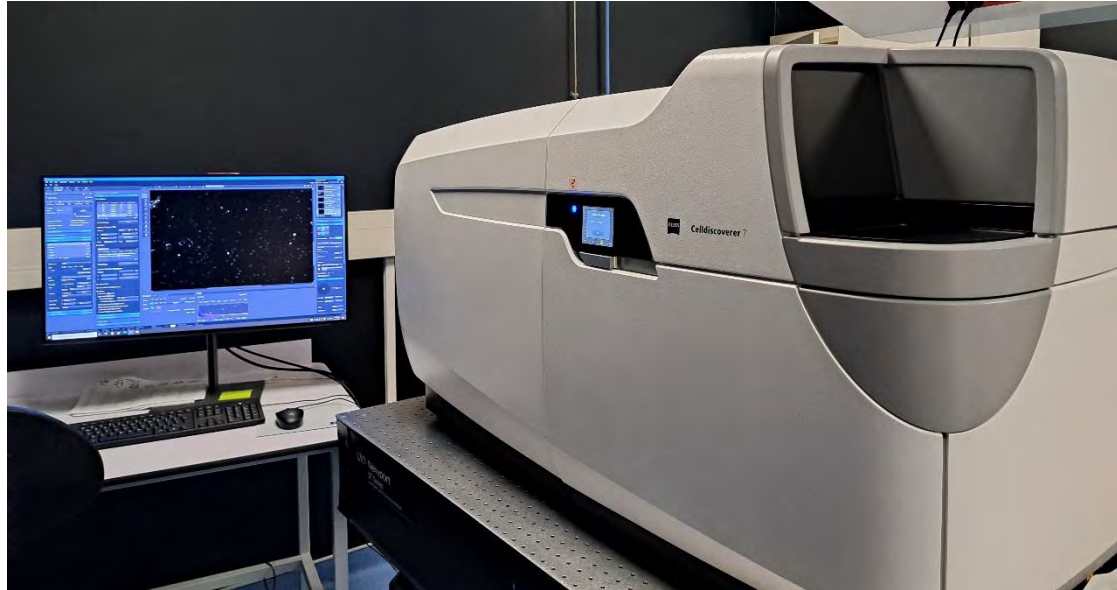


LITC-Centre de Biologie Intégrative, Université Toulouse III - Paul Sabatier
118 route de Narbonne - Bâtiment 4R4 - 31062 Toulouse Cedex 9



Cell Discoverer 7[®]

Medium throughput closed-box automated wide-field fluorescence microscope with high information content for fixed or live cell



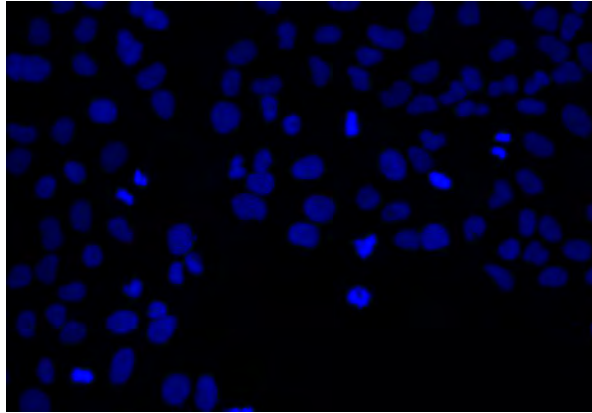
Automated close-box microscope
Wide field
Fluorescence & brightfield
Medium throughput
Fixed or live cells
From individual cell to large model organism
Deconvolution on the fly

High information content
Multiparametric analysis
Statistically data

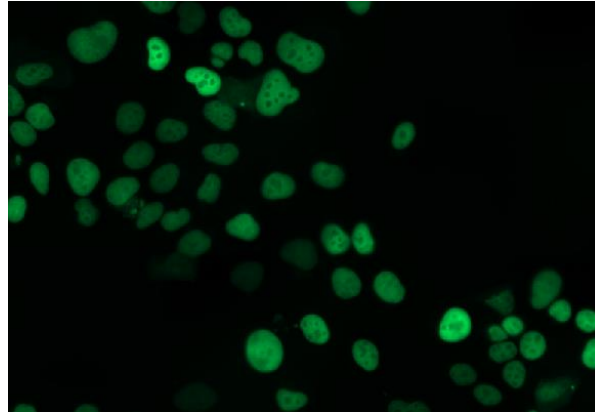
Combine the ease-of-use of an automated microscope for high-content imaging (HCA) with the quality and flexibility of a classic inverted research microscope

Cell Discoverer 7[®]

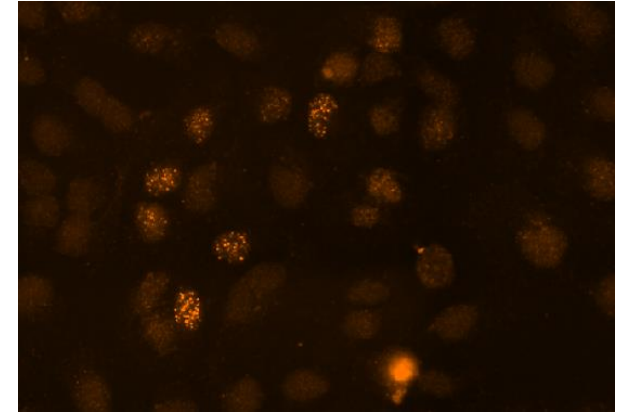
4 Filters, Brightfield & PGC



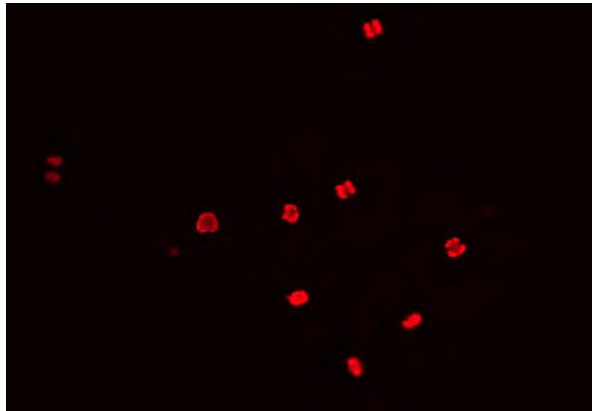
DAPI



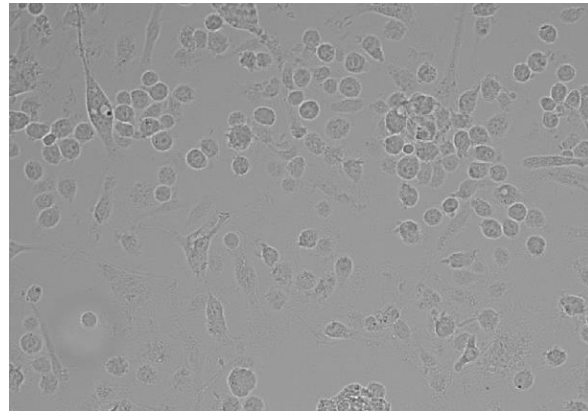
GFP



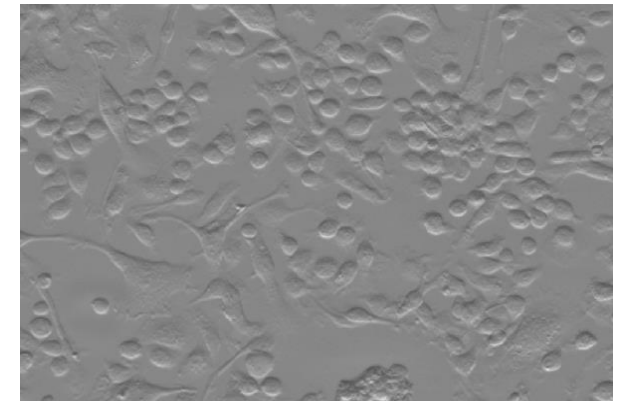
Rhoda



Cy5



Brightfield

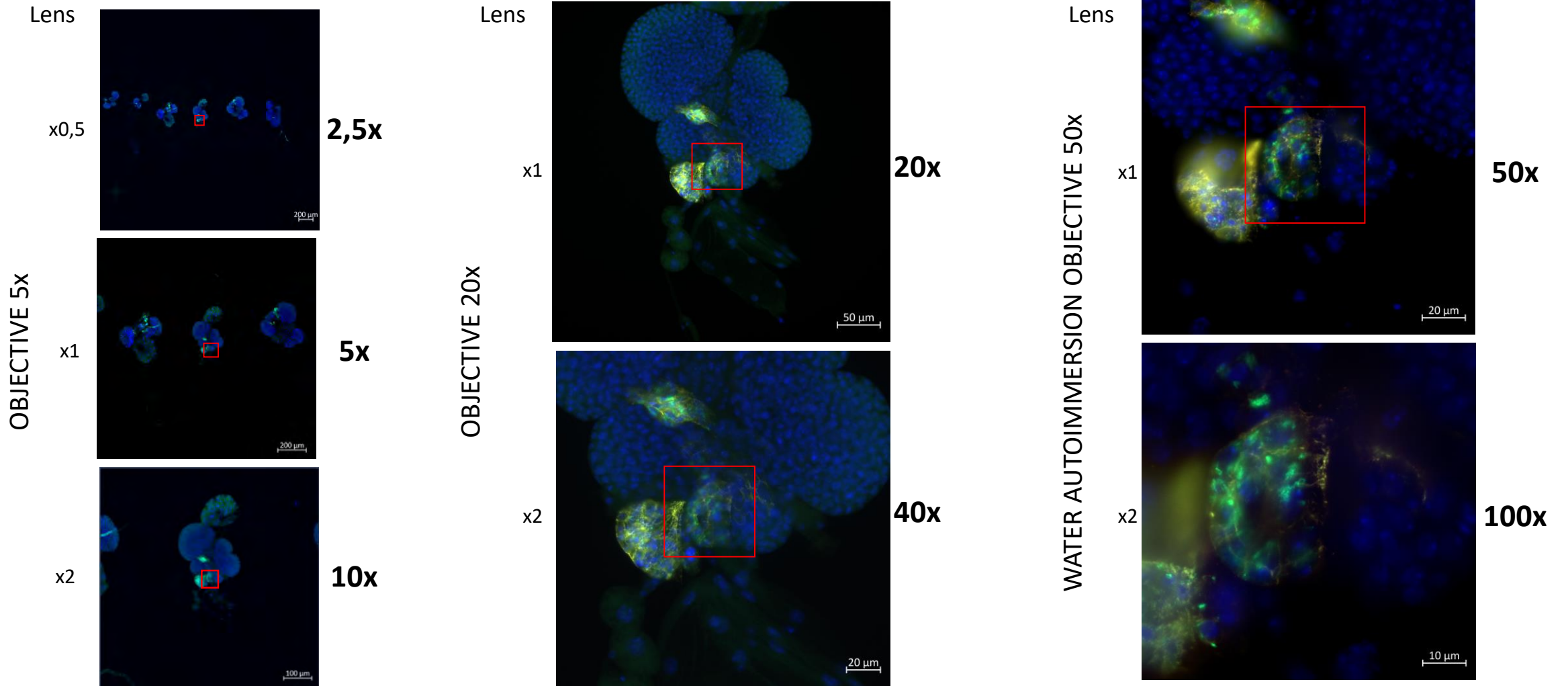


PGC

Live imaging (temperature and CO2 control)

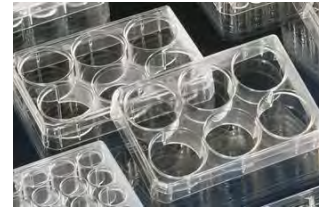
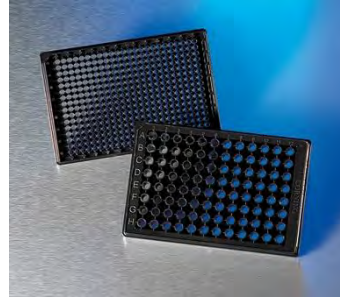
Cell Discoverer 7[®]

3 Objectives, 3 Magnification lens



Prescan (2,5X) to 100X magnification

Multiple supports



Multiwells (6, 12, 24, 96, 384 wells)



slides



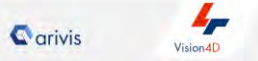
Petri dish
(60, 35mm)



Many possible applications

Analysis example

Arrivis software



The screenshot displays the Arrivis software interface. The main window shows a microscopy image of cells with segmentation overlays. A yellow dashed box highlights a specific cell, which is magnified in a smaller inset window. The 'Objects' panel is open, showing a table of segmentation results. The table has columns for Name, Area, 2D Oriented B..., Children Names, Mean, Intens..., Max, Intens..., Sum, Intensities #2, SNR (Mean/SD..., Mean, Intense..., Max, Intense..., SD, Intensities #3, and SNR (Mean/S... The table lists various segments and their associated metrics.

Name	Area, 2D Oriented B...	Children Names	Mean, Intens...	Mean, Intense...	Max, Intens...	Sum, Intensities #2	SNR (Mean/SD...	Mean, Intense...	Max, Intense...	SD, Intensities #3	SNR (Mean/S...
Segment #1737 (Cellpose-b...	389.220	Segment #148854 (Blob vert), Segment #1...	2496.538	4357.373	10369.000	71988156.000	12.223	826.972	4503.000	267.702	3.085
Segment #1738 (Cellpose-b...	405.253	Segment #208505 (Blob vert), Segment #2...	2853.085	4342.127	15182.000	71388905.000	14.001	663.717	1751.000	77.914	8.519
Segment #1739 (Cellpose-b...	413.754	Segment #59892 (Blob vert), Segment #59...	1966.465	4213.255	7996.000	69796770.000	22.017	668.476	1093.000	54.705	12.220
Segment #1740 (Cellpose-b...	458.888	Segment #87274 (Blob vert), Segment #87...	2123.222	4512.199	6052.000	74640795.000	19.958	716.697	1325.000	58.405	12.271
Segment #1741 (Cellpose-b...	392.340	Segment #72896 (Blob vert), Segment #72...	2633.800	4040.740	9339.000	66377237.000	11.802	635.582	1225.000	70.810	8.976
Segment #1742 (Cellpose-b...	378.662	Segment #9823 (Blob vert), Segment #982...	2235.147	4958.711	8016.000	60881541.000	27.662	822.939	1663.000	69.933	11.768
Segment #1743 (Cellpose-b...	414.566	Segment #76048 (Blob vert), Segment #76...	4740.512	4386.000	5872.000	75044986.000	12.418	666.770	1661.000	96.609	6.762
Segment #1744 (Cellpose-b...	409.424	Segment #38590 (Blob vert), Segment #38...	2568.844	4423.002	12771.000	75814672.000	8.784	676.788	2351.000	95.041	7.121
Segment #1745 (Cellpose-b...	426.962	Segment #32325 (Blob vert), Segment #32...	2715.362	4415.998	11079.000	75871094.000	19.639	713.314	1489.000	71.913	9.919
Segment #1746 (Cellpose-b...	435.153	Segment #69006 (Blob vert), Segment #69...	2052.237	4223.907	8957.000	72578112.000	20.508	725.497	2069.000	82.819	8.760
Segment #1747 (Cellpose-b...	428.589	Segment #188869 (Blob vert), Segment #1...	2815.700	3827.416	6205.000	65555488.000	18.228	568.622	1511.000	72.964	7.793
Segment #1748 (Cellpose-b...	425.707	Segment #87256 (Blob vert), Segment #87...	2294.367	4829.505	10037.000	83429702.000	15.791	801.884	1994.000	92.034	8.713

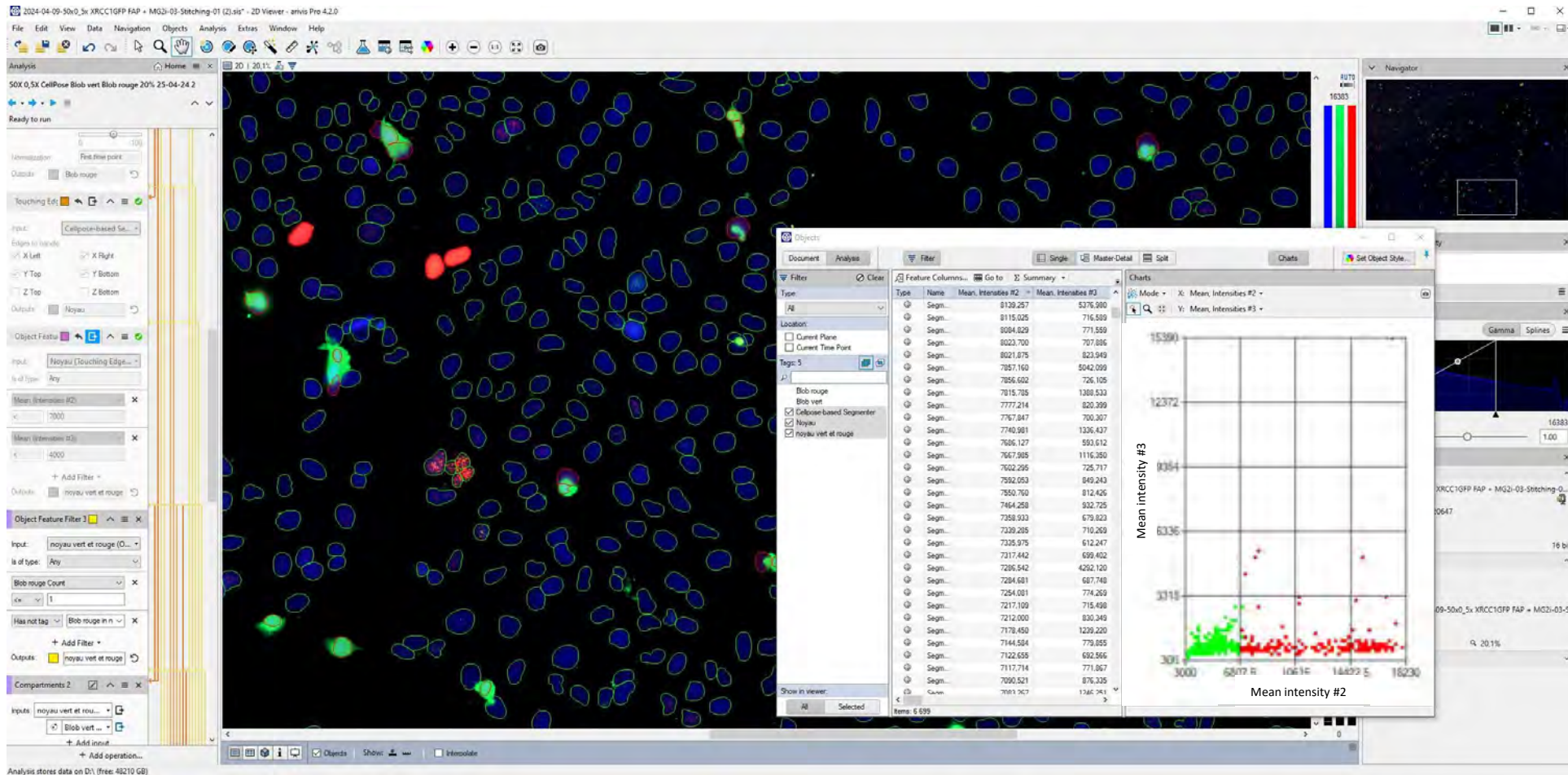
Results per well, per cell and per spot

Cell Discoverer 7[®]



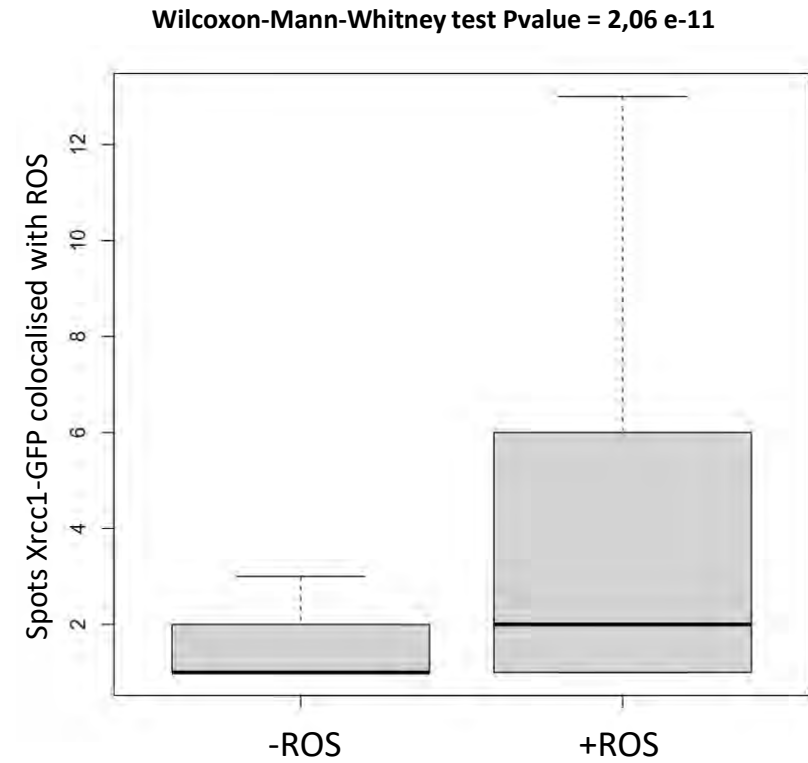
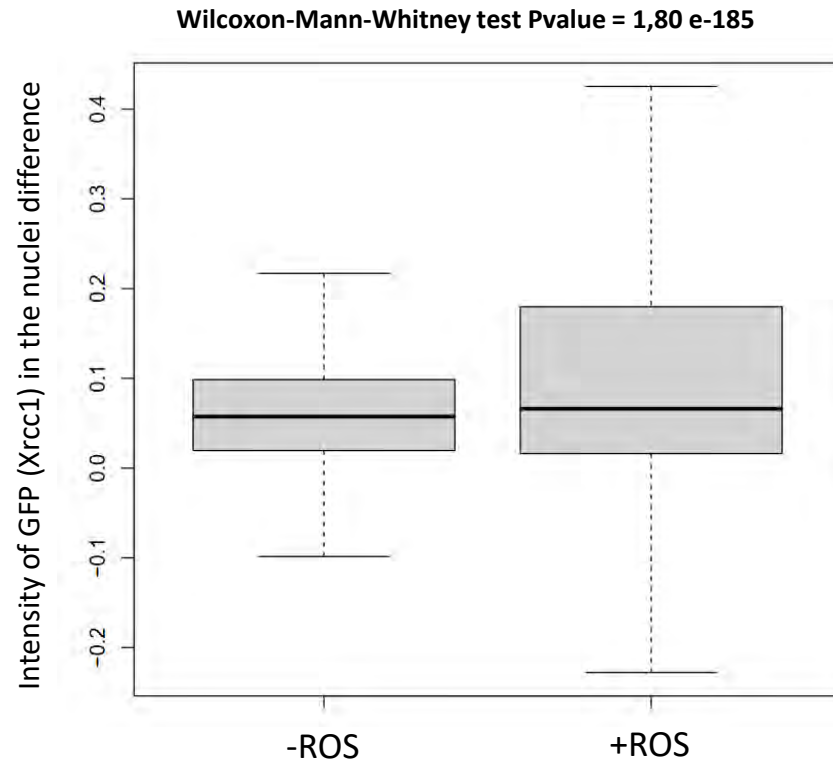
Multiparametric analysis

Arrivis software



Select a subpopulation of the input population by applying a condition or multiple conditions.

Statistically power



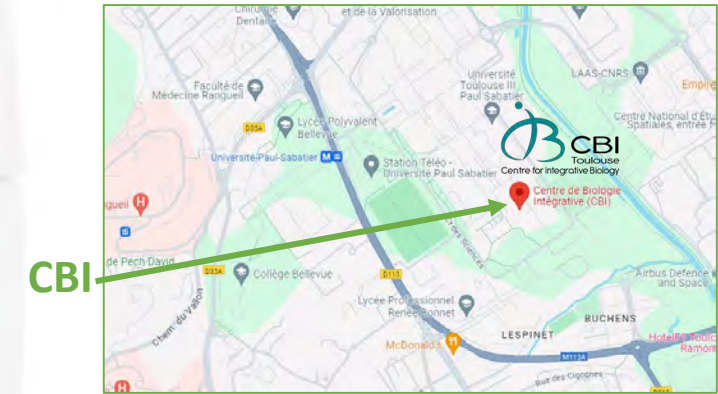
Unbiased and statistically significant data

Cell Discoverer 7[®]

CBI, 4R4 building

Université Paul Sabatier, 118 Route de Narbonne, 31062 TOULOUSE

<https://cbi-toulouse.fr/fr/equipe-litc>



Responsable scientifique : Magali Suzanne
- email: magali.suzanne@univ-tlse3.fr

Responsables scientifiques-adjoints :
Valérie Lobjois- email: valerie.lobjois@univ-tlse3.fr
Thomas Mangeat- email: thomas.mangeat@univ-tlse3.fr

Responsables techniques :
Vanessa Dougados - email: vanessa.dougados@univ-tlse3.fr
Catherine Chailleux - email: catherine.chailleux@univ-tlse3.fr
Brice Ronsin - email: brice.ronsin@univ-tlse3.fr