

COMPARE

CENTRE OF MEMBRANE PROTEINS AND RECEPTORS



Imaging at Nottingham

IN PARTNERSHIP:

The Universities of Birmingham and Nottingham

Prof Steve Hill
Director



Dr Jeanette Woolard
Deputy Director



Dr Steve Briddon
Technical Lead

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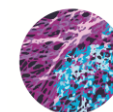
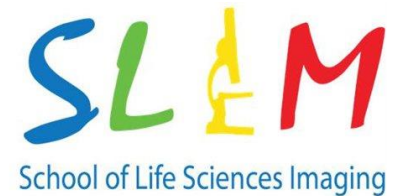


Tim Self
Chief Microscopist, SLIM



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Microscope Officer

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Microscopes + at Nottingham

Zeiss LSM710

Zeiss LSM510NLO Confocor 3

Zeiss LSM880F

MD Image Express Ultra

MD Image Express Micro

IQ Deltavision

Zeiss TIRF 3

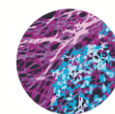
Zeiss Exciter

Phase Focus Livecyte

Olympus LV200

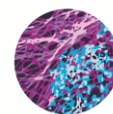
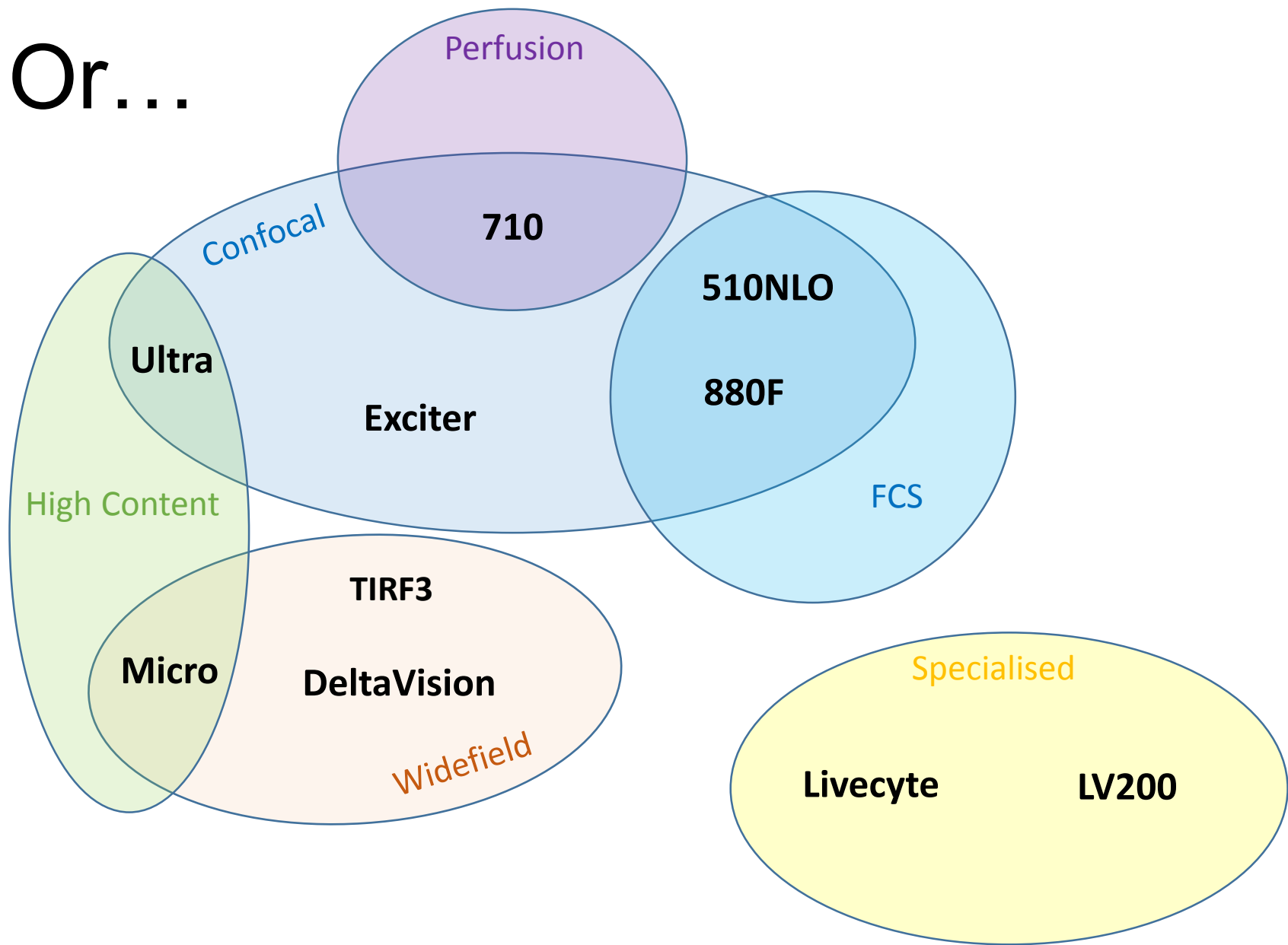
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Or....



FCS – fluorescence correlation spectroscopy



Zeiss LSM510NLO Confocor 3

Inverted confocal microscope

Multiphoton

720-980nm MP, 458nm, 488nm, 514nm, 561nm and 633nm

20x (air 0.5 NA), 40x (oil 1.3 NA), 63x (oil 1.4 NA), 40x (water 1.2 NA) and 63x (water 1.2 NA)

Zeiss LSM880F

Inverted confocal microscope

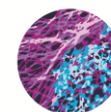
405 nm, 458 nm, 488 nm, 514 nm, 561 nm and 633 nm

10x (0.3 NA), 20x (0.5 NA), 40x (water 1.2 NA) and 63x (oil 1.4 NA)

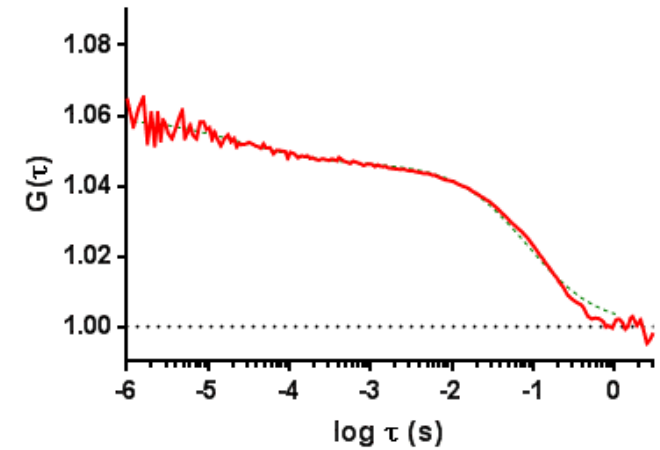
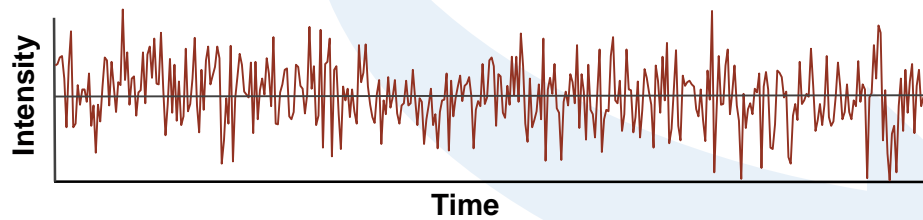
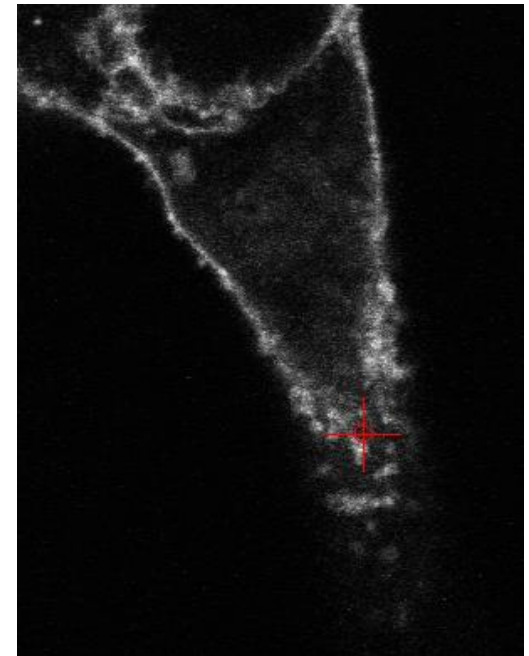
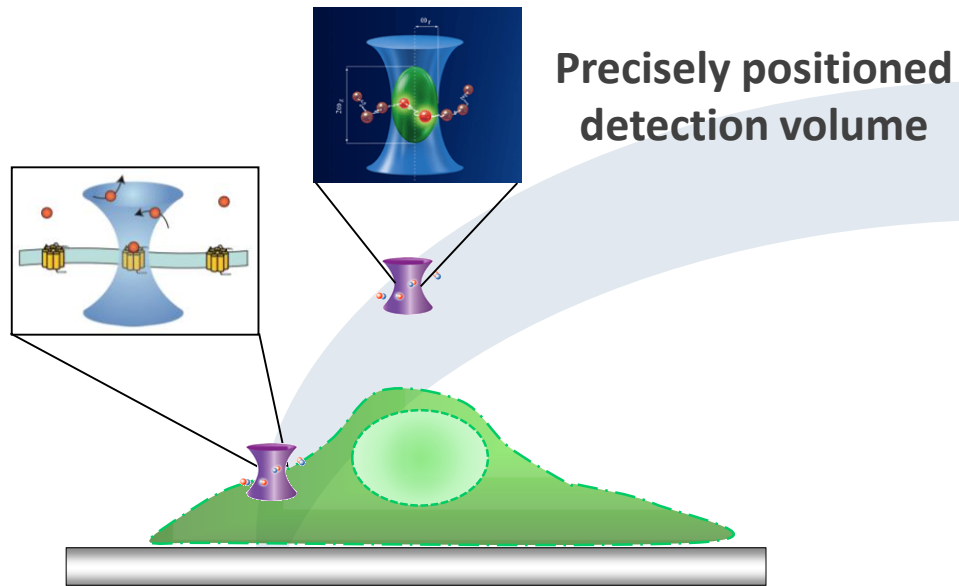


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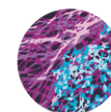


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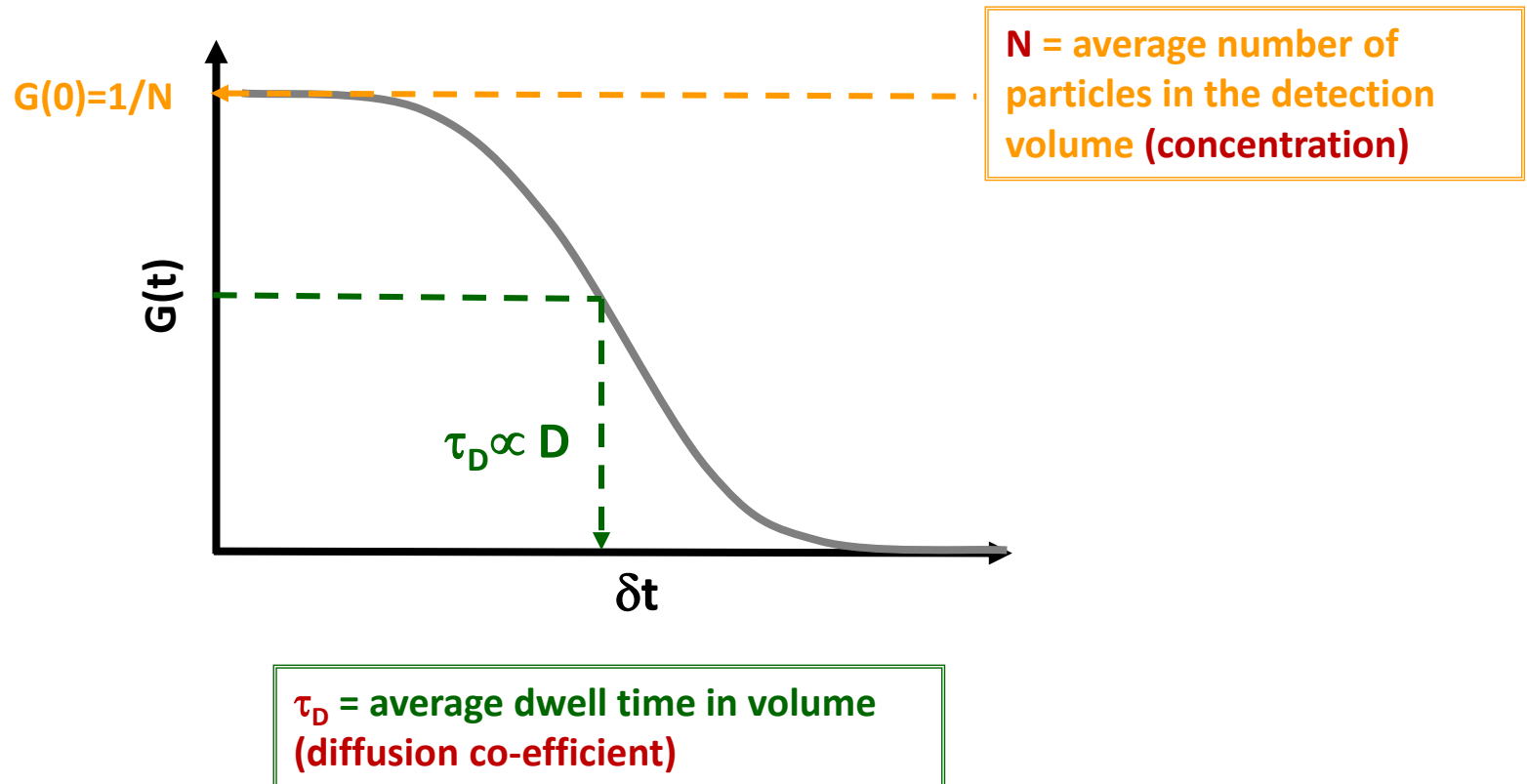


(Zen image analysis)

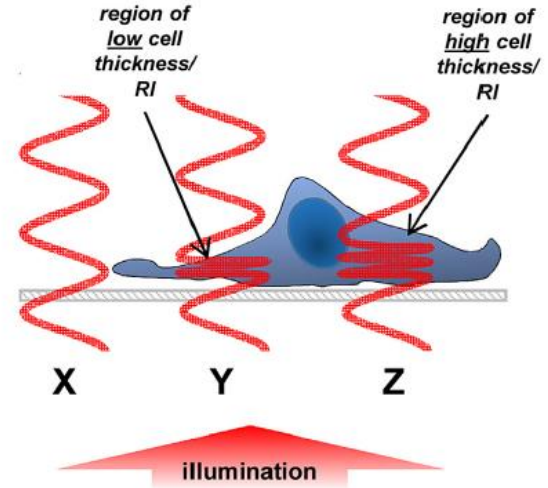
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Phase Focus Livecyte



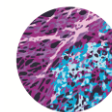
Relating phase to thickness and RI :

$$\varphi = \int (\mu_o - \mu_m) dt$$

- **Ptychography** – phase retrieval
- Quantitative label-free live cell analysis and kinetic cytometry
- Long timescale assays possible
- Variety of plate formats
- Assays include Wound healing, Angiogenesis, cell tracking / migration
- <http://www.phasefocus.com/livecyte/>

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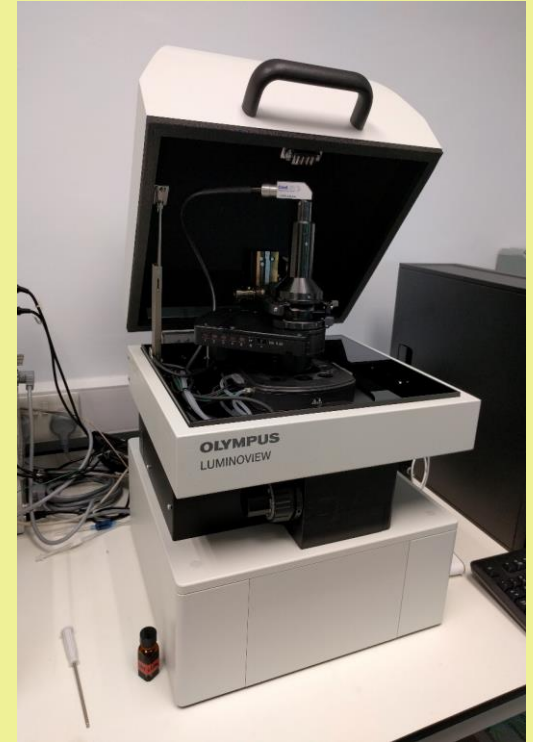
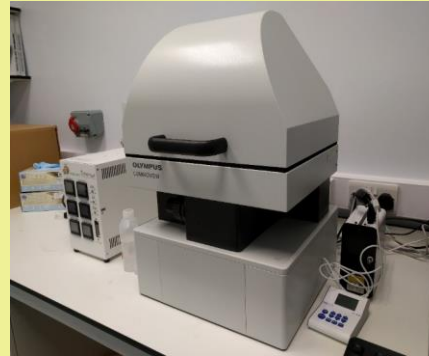


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Olympus LV (Luminoview) 200

- Bioluminescence imaging
- High numerical aperture (NA) lens
- EM-CCD camera
- High S/N ratio with no bleaching/phototoxic effects
- High resolution images
- [Olympus LV 200](#)



High Content



MD Image Express Ultra

Confocal

96 / 384 / 1536 well format

Lasers - 405nm, 488nm, 561nm and 633nm

10x,20x,40x objectives

Robot handling

MD Image Express Micro

Widefield

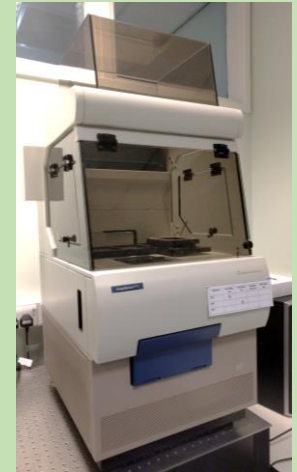
Xenon lamp with DAPI, FITC, Rhodamine and Cy5 filters

10x,20x,40x and 60x objectives

96/384/1536 well format

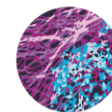
Temperature control

Fluidics



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Contact:



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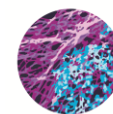


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