Zeiss LSM 780 Multi-Photon / Confocal Microscope - Upright Microscope

GENERAL SPECIFICATIONS:

- Axio Examiner Z1 motorised upright laser scanning microscope with 7 visible laser lines and MAI TAI Deep See Multi-photon laser (690-1040 nm Tunable)
- Freely selectable ROI for laser scanning, bleaching and photoactivation
- Scan speeds of up to 8 frames/second with 512 x 512 pixels.
- xy, xz, xyz, xyzt, lambda, line scan and spot scan modes
- Transmitted light brightfield and incident light fluorescence using metal halide HXP light source
- DIC optics for 20X, 25X, and 63X objectives

MICROSCOPE OBJECTIVES:

- EC Plan-Neofluar 10x/0.30 WD=5.2 mm
- W Plan-Apo 20x/1.0 DIC VIS-IR WD=1.8 (Cover glass corrected)

- W Plan-Apo 20x/1.0 DIC VIS-IR WD=1.8 (Not cover glass corrected)
- LD LCI PA 25x/0.8 DIC WD=0.57 mm Imm Corr (UV)VIS-IR (Multi-Immersion (Oil, glycerine, water))
- Plan Apochromat 63x/1.4 oil
- Clarity Plan NeoFluar 20x/1 TDE-dipping lens with correction collar, 5.6 mm working distance

ILLUMINATION :

- Diode 405nm
- Argon multiline 458/488/514nm (25 mW)
- HeNe 543nm (1 mW)
- HeNe 594nm (2 mW)
- HeNe 633nm (5 mW)
- MAI TAI Deep See eHP DS (690 – 1040 nm Tunable)

DETECTORS:

- Descanned Detectors (Single photon) 2 x GaAsP plus 2 standard PMT NDD detectors
- Non Descanned Detectors (Multi-photon) 2 x GaAsP plus 2 standard PMT NDD detectors with filter sets for blue, green, red and far red

ENVIRONMENT CONTROL:

- Dark incubator chamber with temperature control and LED lighting from Solent Scientific

SOFTWARE:

- ZEN 2011 LSM

  3D and 4D reconstruction and animation.
  Analysis and quantification for co-localisation.
  Software modules for FRAP, FRET, Tiles and Positions and Experiment Designer