



Leica Stellaris 8 confocal microscope / Leica Stellaris 8 Digital LightSheet microscope

Location

Building DaI / ground floor/ room 001

Oddělení Biomatematiky, Fyziologický ústav AV ČR, Areál Krč, Vídeňská 1083, Praha 4

Detailed information

1. Mikroskop. New generation high-end inverted laser scanning confocal microscope. Full control on lifetime information are available through TauSense and FASt Lifetime CONTRast (FALCON) modules and advanced dynamic information can be obtained through fluorescence correlation spectroscopy (FCS) and fluorescence cross-correlation spectroscopy (FCCS). The system can be used as a single plane illumination microscope (SPIM) thanks to the Digital LightSheet module, allowing for fast and gentle image acquisition for large samples (embryo, organoids, etc...).

2. Excitation path.

- CW 405nm laser
- new generation white light laser (range 440-790nm) Laser is pulsed with possibility to modulate from 80 MHz to 40 MHz.
- discrete 488 nm laser.
- Brightfield and fluorescence lamp

3. Detection path.

- high-sensitive time-resolved hybrid detectors (2× HyD S, 2× HyD X, 1× HyD R)
- PMT detector for transmitted light
- Camera for lightsheet

4. Software.

- LAS X with navigator

5. HW modules and accessories. Microinjection, FLIM, FCS, multi-well chamber, life imaging with Okolab.