lyncée tec

Marker-free quantitative biological imaging with Lyncée Tec **Holographic Systems**

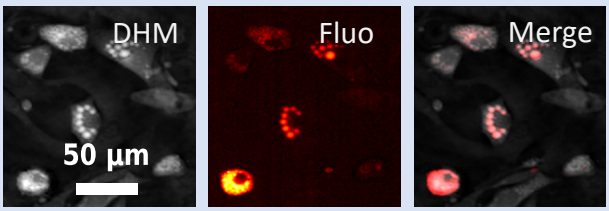
Characterize your delicate cells without perturbing them

Unmet advantages

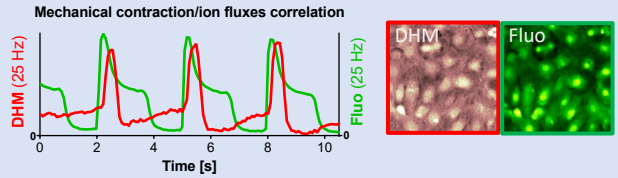
- ✓ **Quantitative information about morphology and intracellular content (dry mass)**
  - ➢ **Two key biomarkers related to cell health**
- ✓ **Millisecond to multi-days continuous recording**
- ✓ **Label-free non-invasive imaging technique (non-perturbing measurements)**

Combine with fluorescence

✓ **Colocalize specific structures**



✓ **Monitor dynamic ion concentration changes**

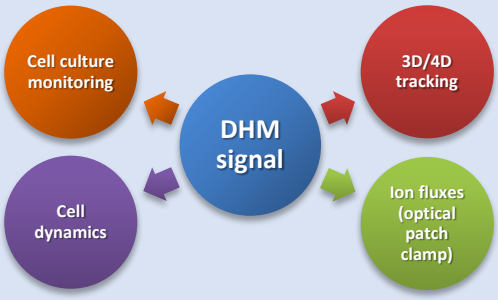


Two solutions available

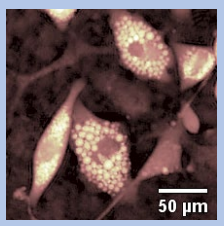
Digital Holographic Microscope (DHM): Standalone microscope here with optional fluorescence module

Digital Holographic Camera to be mounted on an existing fluo. microscope

Key applications

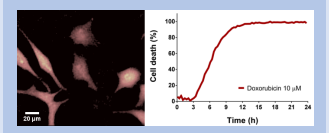


Morphological studies



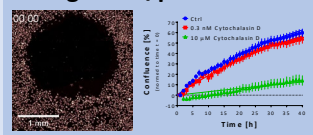
Quantification of lipid production in adipocytes

Cytotoxic assays



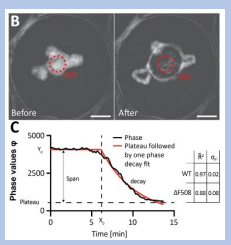
HeLa cell death quantification in presence of doxorubicin

Migration/proliferation



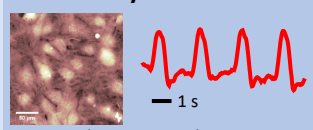
Cell migration inhibition with Cytochalasin D

Spheroids/Organoids



Water influx monitoring upon treatment with fsk.

Cell dynamics



Cardiomyocytes beating cycle quantification

Technical specifications

- ✓ 96-well plate scanned in less than 4 minutes
- ✓ 1.25x to 100x microscope objectives (air and high NA oil)
- ✓ Camera: high sensitivity sCMOS sensor
- ✓ 1 nm accuracy in vertical axis
- ✓ Lateral resolution: MO dependent
- ✓ Acquisition rate: high SNR at 194 fps (optional up to 940 fps)
  - Acquisition time per image: 0.5 ms