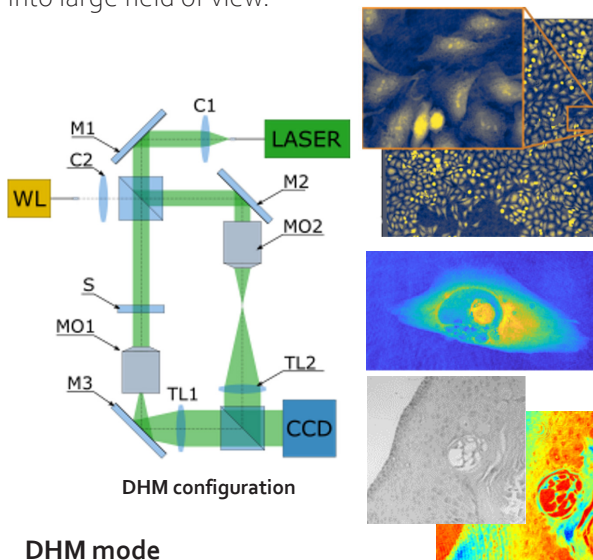


DIGITAL HOLOGRAPHIC MICROSCOPE

DESCRIPTION:

The digital holographic microscope system together with white light mode is efficient tool to marker-free quantitative phase imaging (QPI) and monitoring of biological micro objects: cells and histopathological samples. It provides high resolution optical and phase images with the capability to stitched them into large field of view.



DHM mode

- Image plane hologram
- Phase retrieved with Fourier transform method
- automatic stitching of phases (wide field of view)

White light Mode

- Pigtailed white LED

Magnification / NA 16x / 0.45

50x / 0.7

Field of view 440 × 530 μm

142 × 170 μm

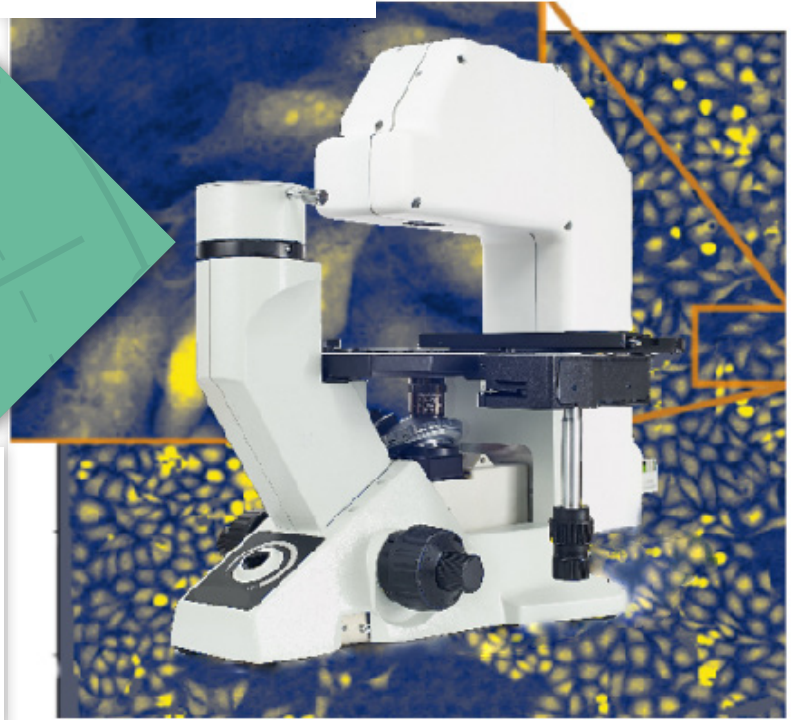
Wavelength 532 μm

Optical resolution ~1.2 μm

Phase resolution $2\pi/100$

Workflow single capture

timelapse



APPLICATIONS:

- Cell culture imaging and monitoring
- Digital pathology and hematology
- Navigation through large FoV

ADVANTAGES:

- Label-free
- Low-cost and easy to apply
- Substructures quantitative phase imaging in large field of view
- Easy location due to white light imaging
- TRL7

OPPORTUNITIES:

- Technology/Commercialization
- Research cooperation
- Application oriented software
- Development of systems with special QPI features

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