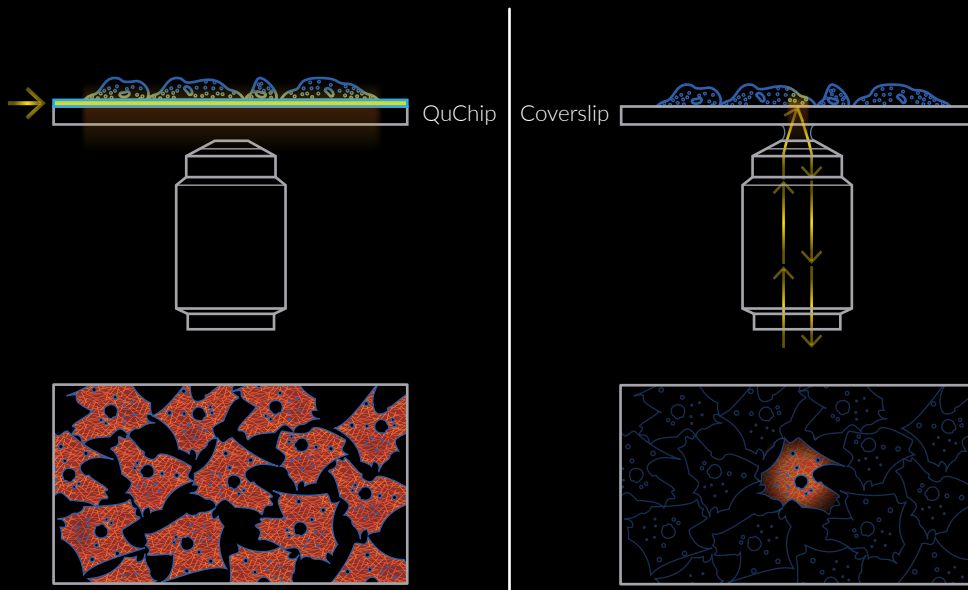


QUSCITE

Reimagining TIRF microscopy

QUSCITE is the world's first waveguide-based total internal reflection (TIR) microscopy system for high- and super-resolution imaging. Scale up your field of view and capture more details in a single shot, without compromising on resolution. Made for live-cell imaging, single-molecule studies and DNA analysis. Its ease of use saves precious time and allows you to focus on what matters most:

Reproducible results for your experiments.



QUSCITE

Conventional TIRF

QUSCITE works with QuChips, which replace your coverslip. They contain thin film optical waveguides (integrated optics) that support a guided mode with a strong evanescent field tail entering into the sample volume. The penetration depth, as well as the illuminated area is only dependent on the waveguide geometry and is independent of your microscope objective. This way you can decouple excitation and detection to enable the capture of TIRF images with any microscope, without modifications reaching field of view on the order of square millimeters.



Ultrawide field of view
(up to several mm²)



Upgrade any microscope
(no setup modifications required)



Superb signal-to-noise ratio
(suppressed background scattering)



Calibrated intensity
(active feedback)



Plug & Play
(no alignment, low maintenance)



Highly homogenous
illumination profile



MADE FOR



large area live
cell imaging



high-throughput single
molecule detection



microfluidic assays



super resolution studies
(e.g. STORM)

QUSCITE integrates the illumination on the chip and allows the imaging of large scale systems way beyond conventional limits – alignment free and within seconds at your fingertips. Applications include:

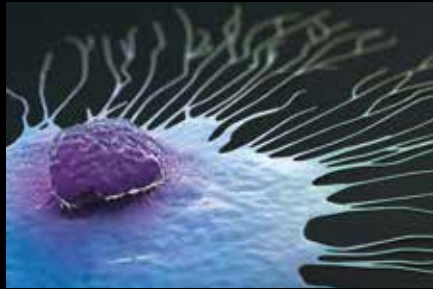


Biochemical assays

microtubule motor gliding
assays

protein-protein and protein-
nucleic acid interactions

supported lipid bilayer rese-
arch



Live-cell imaging

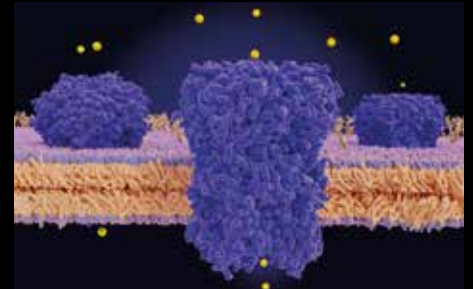
endo- and exocytosis

focal adhesions

cell-cell communication

plasma membrane dynamics

neurites in cultured neurons



Single-molecule studies

smFRET and localization

DNA origami

spatial biology (MERFISH, DNA
PAINT etc.)

receptors and ion channels
studies (e.g. GPCRs)

Features include:

compatibility with any objective

well-defined penetration depth

perfect field homogeneity

auto-alignment

calibrated intensity and active feedback

light sources included (up to 6 colors)

QUSCITE consists of a control unit, light coupling unit and a stage insert with a set of sample holders for easy preparation and handling of your samples. The sample is directly prepared on the QuChip and then inserted with the sample holder into your microscope equipped with QuScite. As part of the device installation we will provide integration of QuScite into your imaging system.

Simply install a **QUSCITE** system on any microscope and widen your imaging horizons!

EXCITED? REACH OUT TO US.
QUSCITE WILL BE LAUNCHED IN SUMMER 2022



INTERHERENCE
HIGH SENSITIVITY MICROSCOPY

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