



Fondazione
Cottino

HOLOSCOPE

DESCRIPTION:

HOLOSCOPE is an innovative Two-Photon System for confocal imaging and simultaneous acquisition of multiple fast fluorescence signals. Real time dynamic process visualization of the retinal network with the ability to also monitor specific cell types would be of tremendous value to the field.

ABSTRACT:

HOLOSCOPE is an external module adaptable to all conventional light microscopes and is supplied with a user friendly software interface. It was developed by our team and has proven to be an effective tool in Neuroscience. We strongly believe that this innovative tool can be successfully translated into Ophthalmic Pre-clinical Research by permitting high spatio-temporal resolution imaging on retinal slices. The system generates confocal fluorescence images and provides the simultaneous excitation of multiple sites of interest (up to hundreds) with high spatiotemporal resolution (1 kHz) in a simple optical layout configuration. The product is addressable to medical research centers, pharmaceutical companies and University research centers. Together with the commercialization of the system in its current layout we propose to translate the system to in vivo Pre-Clinical Research by implementing and developing closed loop sensorless adaptive optics.