



Innovative Concept

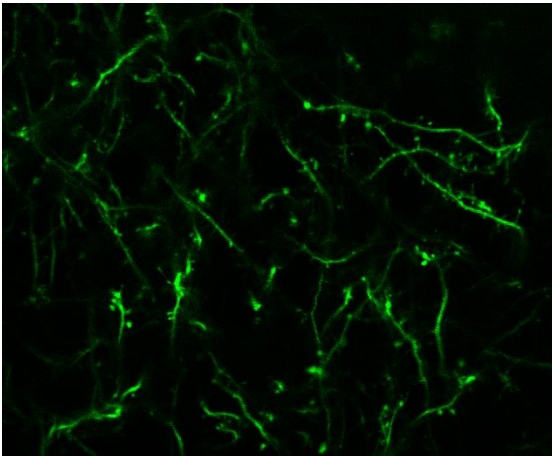
The Pryer lens is a new endoscopic objective compatible with common optical microscopes, especially modern Two-photon microscopes. An unconventional optical design combines a very small tip size to be minimally invasive with a large numerical aperture for high resolution.

This state-of-the-art objective allows for in vivo deep tissue access and visualization in difficult-to-reach regions such as the hippocampus. Image acquisition with sub cellular spatial resolution at sub-second sampling rates becomes a reality.

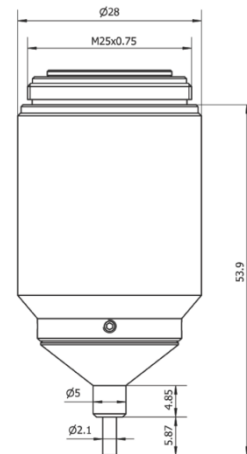
Specifications

Magnification / NA	70x/0.7
Type	Plan Fluorite NIR
Immersion medium	Water
Correction	Infinity / zero cover glass thickness
Working distance	300 µm
Field-of-view	200 µm
Transmission range	450-1030 nm
Tip diameter	2.1 mm

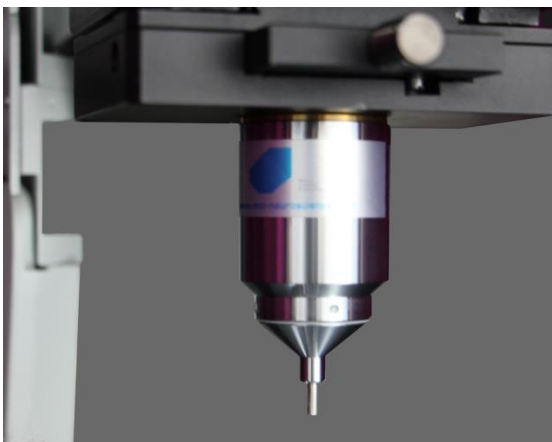
Deep tissue imaging at sub-micron resolution



In vivo micrographs from mouse hippocampus



Basic outer dimensions of the Pryer lens



Pryer lens mounted on 2P microscope

APPLICATIONS

- Neuroscience – enabling neuroscientists to visualize deep brain tissue such as the hippocampus. Imaging microglia in the brain and spinal cord. Measuring mast cell degranulation in the dura.
- Immunology – allowing immunologists to record from spleen and lymph nodes through small lesions of the animal body.
- Botany– enables botanists to spot on transplanted developments and other events such as pollination and fertilization.