

CONVERTS A STANDARD OLYMPUS BX51WI INTO A TWO-PHOTON MICROSCOPE WHILE RETAINING STANDARD MICROSCOPE FUNCTIONS (TRANSMITTED LIGHT AND EPIFLUORESCENT IMAGING).

MAKES USE OF DETECTOR AND SCANNER SYSTEMS DEVELOPED FOR OUR MOM 2P MICROSCOPE INCLUDING THE SUTTER "WHISPER-QUIET" RESONANT SCAN BOX.

UPPER AND LOWER PHOTODETECTORS FOR INCREASED COLLECTION EFFICIENCY.

FULLY COMPATIBLE WITH THE SUTTER MPC-78 LARGE MOVING STAGE AND **MOTORIZED FOCUS DRIVE.**

DESIGNED TO BE CONTROLLED WITH THE SUTTER MCS (MOM COMPUTER SYSTEM) IMAGING SOFTWARE INCLUDING RESONANT SCANNING WITH MSCAN 2.0.

ALSO FULLY COMPATIBLE WITH MOST MULTIPHOTON FREEWARE SUCH AS SCANIMAGE 5.0, HELIOSCAN, AND MPSCOPE.

BREADBOARD FORMAT IN SCAN PATHWAY ALLOWS EASY ADDITION OF PHOTOSTIMULATION LIGHT SOURCES TO THE MAIN SCANNED LASER PATH.

INCLUDES DETECTOR(S) AND "WHISPER-QUIET" RESONANT SCAN BOX DEVELOPED FOR THE MOM™ 2-PHOTON MICROSCOPE



DF-Scope™: Multiphoton Imaging Package for Olympus BX51WI Microscopes

The **DF-Scope**[™] is a customer-inspired, multiphoton, imaging package for the ubiquitous BX51WI upright microscope. Many laboratories already have BX51WI microscopes for use in electrophysiology and epifluorescent imaging experiments. The DF-Scope package provides the necessary optics and electronics for the BX51WI to be used for multiphoton imaging (with the addition of a Ti:Sapphire laser). The design incorporates subassemblies from our MOMTM (Movable Objective Microscope®) system including resonant and galvo scan boxes and controllers, detector paths, PMTs, PMT power supplies, scan lenses and tube lenses.

A hallmark of multiphoton imaging is that all of the light emitted by the sample is known to be from the focal volume as a result of the nonlinear excitation of the fluorophore. High sensitivity photomultiplier tubes (PMTs) are used to collect as many of these photons as is possible in order to reconstruct the scanned image. The DF-Scope design allows for two detector paths to gather more emitted light, one above the sample and one below. If using a thin sample, like a brain slice, we recommend the lower (sub-stage) detectors to increase signal detection. Additional signal will be available at the trans detector path. This substage detector assembly is designed to work with a variety of Olympus condensers.

NOTE: The **DF-Scope** design requires an Olympus BX51WI and the following Olympus parts: WI-ARMAD, 5-UR710LP and U-M619.

Find more information at www.sutter.com.