

**SIMPLE MOVING MICROSCOPE BASED ON AN  
MP-285/MPC-385 MOTORIZED MICROMANIPULATOR**

**X, Y AND Z AXES OF MANIPULATOR USED TO POSITION  
THE MICROSCOPE OVER THE SAMPLE AND FOCUS.  
NO NEED FOR LARGE TRANSLATORS OR MOVING STAGES**

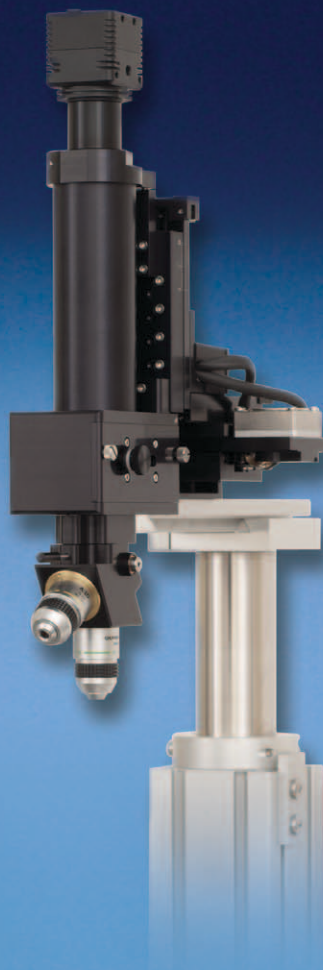
**OPTIMIZED TO ALLOW *IN VIVO* AND *IN VITRO*  
EXPERIMENTATION ON ONE SETUP**

**FREE MULTI-LINK™ SOFTWARE COORDINATES  
MOVEMENT WITH MICROPIPETTE POSITIONING OF MPC-200**

**TRANSMITTED IR AND EPIFLUORESCENT IMAGING MODES**

**FLEXIBLE EXCITATION PORT ALLOWS ADDITION OF SECONDARY  
LIGHT SOURCES FOR PHOTOSTIMULATION**

**ACCEPTS STANDARD OLYMPUS, NIKON, LEICA AND  
ZEISS OBJECTIVES**



**NEW!**

Shown with optional camera.  
Objectives not included.

## SON OF MOM: SIMPLE MOVING MICROSCOPE

The Son of MOM (**SOM**) is a small, simple microscope designed to allow a single experimental setup to be used for both *in vivo* and *in vitro* experimentation. As in our two-photon Movable Objective Microscope (MOM), positioning over the sample and focusing is accomplished robotically. This removes the need for the large translators and stages that normally limit the available space beneath the objective for *in vivo* experimentation. For example, the **SOM** will allow whole-cell patch recordings from neurons *in vivo* on one day followed by multi-cell recordings in slices on the next.

The **SOM** opens up experimental possibilities that otherwise might be limited by the ever growing space constraints in modern laboratories. The **SOM** is designed to take full advantage of our new free Multi-Link™ software program for micromanipulator positioning.

For instance, during whole-cell patch recording in slices it is commonly necessary to search over a large area of tissue to find neurons appropriate to your experiment. With the **SOM**, you simply translate over your sample to search for your target. The software programs will then retrieve your recording and stimulation pipettes so that you can begin recording immediately. Moreover, if you then find you need to stimulate a region outside of the current objective's field of view, the programs will allow you to lock the position of your recording pipette and reposition the objective and stimulating pipette(s) to their required positions.

*How it Works:*

The **SOM** is designed to take advantage of the high-quality images that can be obtained with a simple IR LED-based transmitted light source

combined with an IR capable CCD camera. This combination is sufficient for the majority of *in vitro* electrophysiology needs. The **SOM** is also designed with a two-position filter cube to allow for identification of fluorescently-tagged cells for recording or for photostimulation. If you populate both of the filter cube positions, one of the filter sets will need to pass IR to allow for transmitted light imaging.

The fluorescence excitation port of the microscope has C-mount threading as well as mounting holes for standard cage components. This allows for customization by the user to various experimental needs. For instance, multiple light sources can be coupled to the excitation port with small cage assemblies.

**SUTTER INSTRUMENT**

One Digital Drive • Novato • CA 94949 • Phone 415.883.0128  
Fax 415.883.0572 • Web [www.sutter.com](http://www.sutter.com) • Email [info@sutter.com](mailto:info@sutter.com)