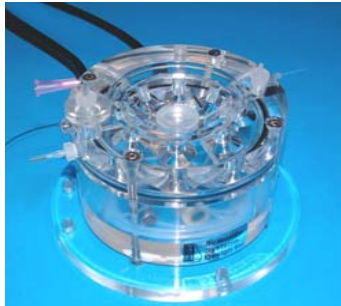




BRAIN SLICE CHAMBER SYSTEMS

Versatile, precision engineered tools for long service



BSC1

- *Interface and submerged preparations
- *Removable net type insert
- *Low noise temperature control



BSC2

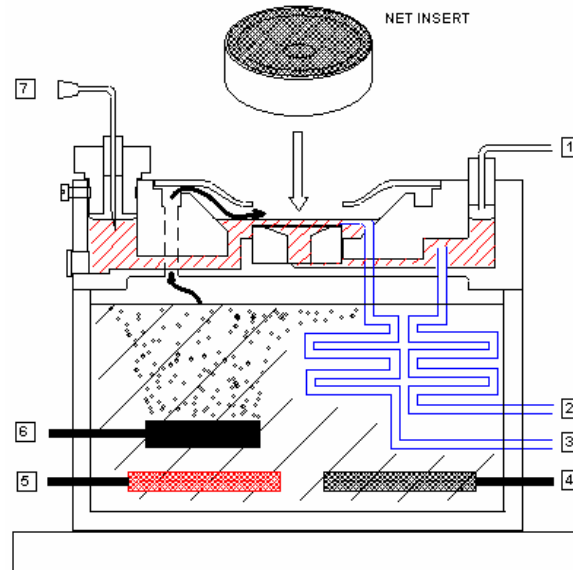
- *Interface preparations
- *Templates for single or dual wells
- *Minimal fluid dead space
- *Stable recordings for many hours



BSC3

- *Four or six well chamber with independent lines
- *Interface or submerged preparations
- *Fluid level adjustable in each well
- *Removable nylon net and insert
- *High throughput pharmacological studies

BSC1 SCHEMATIC DIAGRAM



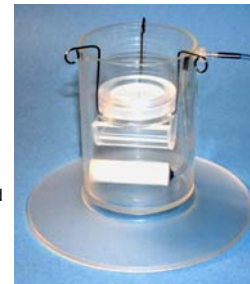
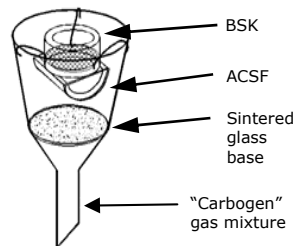
1. BUBBLE TRAP
2. HEAT EXCHANGER FOR PERFUSION FLUID SUBMERGED/INTERFACE MODE
3. HEAT EXCHANGER FOR PERFUSION FLUID TO SLOPED INSERT
4. CONTROL TEMPERATURE SENSOR
5. HEATING ELEMENT
6. OXYGEN/CARBON DIOXIDE GAS BUBBLER
7. EXIT FOR PERFUSION FLUID VIA SUCTION LINE

BSK BRAIN SLICE KEEPER



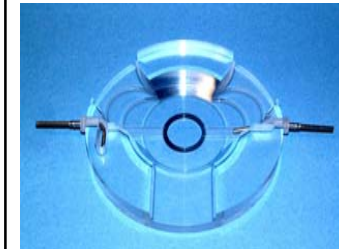
BSK

- *Brain slice keeper for pre-incubation of slices
- *Hooks into standard Buchner filter funnel for bubbling oxygen /carbon dioxide mixture into ACSF or in purpose designed holder (right panel picture)
- *Modular design allows for easy cleaning and net replacement



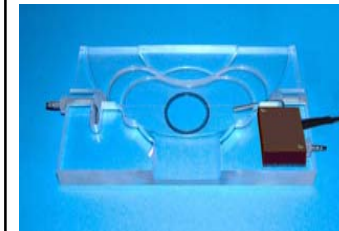
MICROSCOPE STAGE CHAMBER SYSTEMS

Unique designs for high quality imaging and easy electrode approach at shallow angles



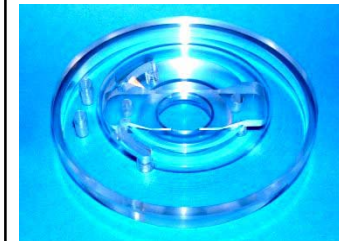
MS1

- * 1 ml capacity flow-through upright stage chamber
- *Unique profiled contour for rotary and swing type turrets for par-focal viewing
- *Glass coverslip base
- *Easy removal for cleaning



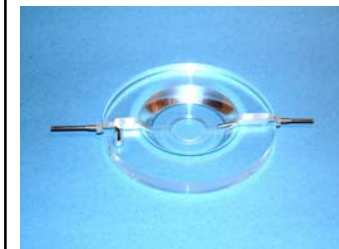
MS2

- *Similar to MS1 but rectangular with an optional integral in-line perfusion solution heater MH02 for temperature control with our PTC03
- *Modular design for easy cleaning of parts



MS3

- *Interface slice preparation on a compound microscope stage.
- *Coverslip base
- *Templates for single or dual wells
- *Small dead space



MS4

- *1ml capacity submerged preparations
- *Glass coverslip base
- *Temperature control system available

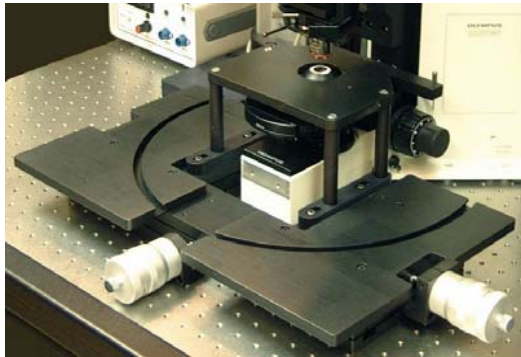


TC1

- *In vitro studies of oocytes, organs and aquatic preparations
- *Insert with silicone rubber in-fill for pinning preparations
- *Mini manipulators for solution feed

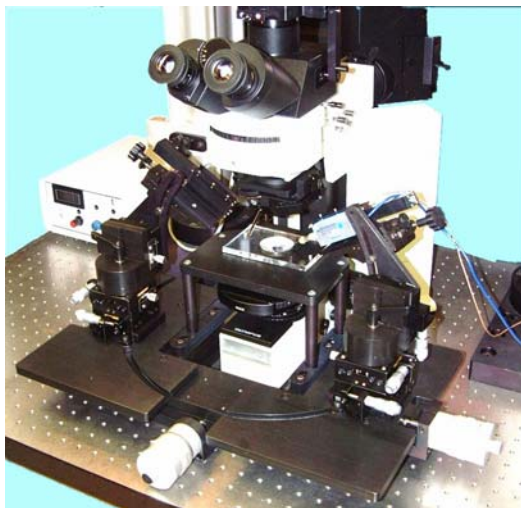
X-Y MICROPOSITIONING OF PREPARATIONS AND MANIPULATORS AROUND CONFOCAL MICROSCOPES

Precision engineered tools for long service

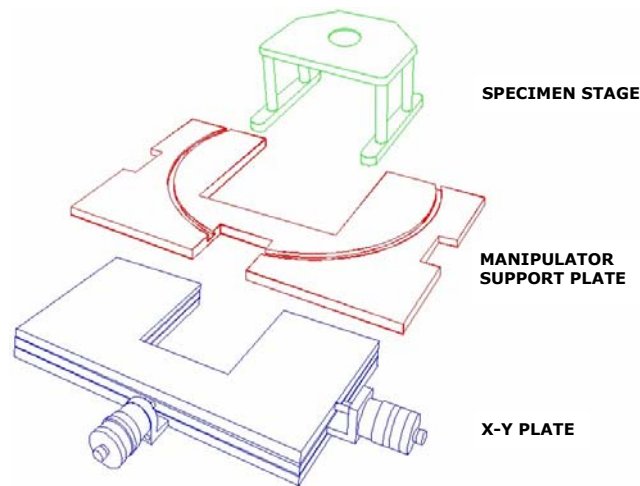


XY MICROPOSITIONER

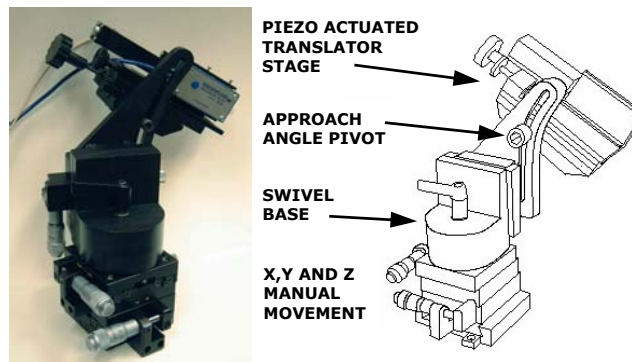
- *X-Y positioning of preparation and impaled or patched cells around a fixed optical axis
- *Heavy base plate with low centre of gravity design for maximum stability moves manipulators and preparation in unison
- *Radially grooved quadrant plate for clamping micro-manipulators around microscope optical axis
- *Quadrant plate can support up to four of our heavy duty **XYZZA** Piezo actuated micromanipulators
- *Maintains easy access to microscope condenser and focus



EXPLODED LINE DIAGRAM OF X-Y MICROPOSITIONER SYSTEM



LINE DIAGRAM OF XYZZA PIEZO MICROMANIPULATOR

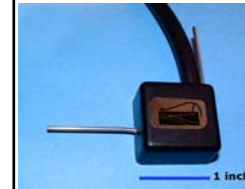


- ***XYZZA** manipulator features **X,Y,Z** with **Z** Axial coarse and fine Piezo control
- *X-Y-Z base translators feature stainless steel cross roller bearings
- *Swivel base with quick lock action and adjustable stop
- *Radial arm extends from swivel base and supports Z-axial movement
- *Z-axial movement features coarse manual movement and fine Piezo actuated flexure system giving +/- 125um travel
- *Additional swivel base built into Piezo stage with lock position for easy electrode change - see below



OTHER PRODUCTS INCLUDE...

MH02



- *Compact in-line perfusion solution heater
- *Heat from ambient to 55° C at flow rates between 1 to 5 ml/min
- *Microscope stage and other preparation temperature control, used with our **PTC03**



PTC03

- *Low noise direct current output temperature controller
- *35 Watt heat output
- *Use with the **BSC** chambers and **MH02** perfusion solution heaters



PS1

- *Unattended perfusion solution switching
- *Increased reproducibility
- *Pinch and Teflon™ valves with fast switching
- *Manual and external valve control
- *Choice of configurations for economy and system upgrades