


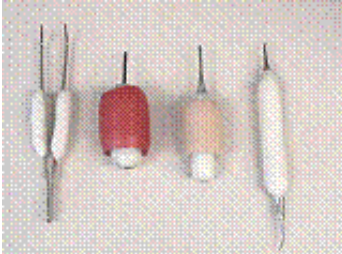

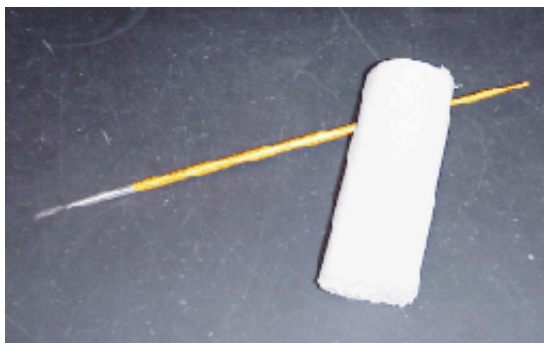


## MICROMANIPULATION TOOLS AND MODIFICATION TECHNIQUES

Ergonomic Solution	Features	Procurement
 <p>Fisher brand* Dissecting Forceps Reverse Action</p>	<p>Sharp pointed tips are normally closed            Squeeze handles firmly to open tips            Can be sterilized by EtO/gamma radiation            Latex free            Autoclavable            Rockwell hardness: 45 HRC</p>	<p>BearBuy (SciQuest)  <a href="#">Login to Blu</a>            Click "Finance" Tab            Click "Fisher UCOP"  <u>Search:</u> Part# 08906</p>
 <p>Low force forceps</p>	<p>Reduces force required to hold specimens in forceps while processing</p>	<p><a href="#">Surgipath</a>            DI15585            5 1/2 inch forceps</p>
 <p>Precision tweezers with foam/molded grips</p>	<p>Molded and foam grips for tweezers manufactured by Excelta.</p>	<p>BearBuy (SciQuest)  <a href="#">Login to Blu</a>            Click "Finance" Tab            Click "Fisher UCOP"  <u>Search:</u> Part# NC9664342</p>
  <p>Thermo plastic pellets</p>	<p>Low-temperature thermoplastic pellets mold together quickly and easily to adapt handles, splints and equipment. The pellets can be used to build up handles. When heated to 140 degrees F (60 degree C), pellets soften quickly and can be formed into a mass that can be molded and remolded as needed. Heat in water, on a heating plate or in a microwave oven. The thermoplastic will stick to most porous surfaces.</p>	<p><a href="#">North Coast Medical</a>            1#: NC325113            #: NC32513</p>
<p>Alternative Handle for Paint Brush</p>	<p>Insert the end of a paintbrush or feather into Plastizote Tubing to create an alternative way to grip and angle the tool. Make sure the length of the tubing is long enough for your hand size.  <b>Plastizote Tubing</b> is a durable, white, closed cell plastic-</p>	<p><a href="#">NC Medical</a>            #NC35033</p>



basedfoam that is lightweight and easy to hold. This tubing will not absorb water.



Plastizote Tubing



**Cylindrical Foam** is a heavy and dense foam that provides great stability and cushioning. It can be cut lengthwise to wrap around a tool to increase the grip size, thus reducing pinch grips.

NC Medical

#NC35002

Cylindrical foam to enlarge dissecting needle

Alternative Handle for Paintbrush



Tape a 3/4 or 1-inch plastic cable clamp, depending on your finger size, onto the middle of the paintbrush. Insert your index finger inside of the cable clamp so you can more easily maneuver the brush. Plastic cable clamps can be purchased at most hardware stores or at the website identified in the right column. For a small to medium index finger size order the 3/4" in. and for a larger index finger order the 1 in. clamp. This type of handle is useful when needing to move anesthetized fruit flies while looking at them underneath the microscope.

Wiring Products

Loom and cable clamps

#CC-2512 - 3/4 in.

#CC-2516 - 1 in.

To make a handle modification, attach the rectangular object (CO2 pad) to a 1/8-inch thick piece of plastic with Velcro (place



Add a handle

the Velcro underneath the CO2 pad so it can be connected to the top of the plastic). Plastic can be custom-cut at Tap Plastics in El Cerrito (525-3508).

When measuring for the plastic, allow 3-inches extra in length to attach the handle. A handle such as a knob, foam, cable clamp or T pipe molding can be attached to the outer 3-inches of the plastic piece with rubber cement. Make sure the handle will encourage using a neutral hand posture with a minimal amount of gripping force.



Enlarge forceps to reduce pinch grip

**Enlarge** the grip of the forceps by cutting a wine or champagne cork in half and then take one of the cut sections and cut it in half the long way. Use silicone to adhere the two halves to the outside of the forceps.