

## COMING RIGHT UP

Imagine you're a scientist with 50 fruit flies. You're not satisfied to just sit around and count them all day. You want to poke around, find out what's going on with your little chums. First you need something to hold them so you can encase them in gel.

Where do you get one of those? Down you go into the bowels of Scaife Hall—past the laundry and medical equipment lining the corridors—to the Department of Cell Biology and Physiology/ Pharmacology Machine Shop. There, you meet Bill Hughes.

You present him with a sketch. Some of the measurements are metric. Some are English. The drawing is not to scale. It's on a coffee-stained napkin. A few days later, Hughes presents you with a nifty fruit fly holder. It works perfectly.

For 42 years, Hughes has turned the vague sketches of School of Medicine researchers into devices that have pushed all manner of research forward. His shop, which now includes Travis Wheeler, has also built creations to help surgeons and disabled med students. Some recent favorites appear here.

The ribbed sausage/barrel? A clamp to record electrical impulses through a nerve. The finished product is the size of a pencil tip. (See prototype below.)

The box with the smiling face? Plexiglas case for an anatomy lab.

That thing at the bottom with the Japanese characters? Hughes figured it out—even though he cannot read, write, or speak Japanese. (It attaches electrodes to wafer-thin slices of spinal cord.) —Joe Miksch

PHOTOGRAPHY  
FRANK WALSH

