

MAINTENANCE SHOP

The shop manager, Clint Steffan has over 25 years experience in Electronic design, test, and repair in analog, digital and mixed signal systems. The Biology Repair Shop has the capability of repairing most electronic, mechanical and electro-mechanical equipment, including refrigeration systems. The shop maintains the equipment for the teaching labs as well as for the research staff. In addition, various custom parts, assemblies and the odd widget can be built for research projects. Repair services are available to other departments on an as-time-available basis. The machine shop provides the capability to make various mechanical assemblies from simple hole drilling to precision milled and bored shapes. On occasion, for more complex pieces, we can make use of the Physics machine shop equipment on an as-time-available basis.

Major machine shop equipment include: A Hardinge lathe, used for turning cylindrical shapes, cutting internal and external threads, and boring precision centered holes



and a milling machine , for machining custom shapes in metal or plastic and drilling precision placed holes and patterns.



The Maintenance Shop also has: a drill press for drilling general purpose holes up to 1" in diameter in metal and 3" to 4" holes in plastic or wood; a horizontal metal saw for cutting metal and plastic bars, and rods up to 4" in diameter; a chop saw for end cuts on wood or plastic up to the size of a 2" x 4"; and a bench vise.

Sample work performed: Rebuild centrifuge spindles. Refurbish centrifuge motors and various brush and brushless motors – Incubator blowers, pumps, etc. Frequently perform component level repair of board versus buying new boards from manufacturers. Often can trace alternative source for parts instead of buying from equipment manufacturer. Repair/recharge small refrigeration systems.

Contact: Clint Steffan, Manager (813)974-2667 or (813) 409-7554 ISA 1032 cksteffan@usf.edu