

Supplies and Equipment for the Laboratory

By

Tammy Mangold, MEd, CST/CFA  
Director Surgical Technology, Rolla Technical Center

## Essential equipment

When planning the laboratory think about the entire patient experience from the time they come to the operating room until the time they leave the operating room. Since we teach our students how to transport patients, a *stretcher* is essential. Once the patient gets to the operating room, they are transferred onto the operating room bed. It would be good to have both a manual and an electrical bed. If you must choose between one or the other, the *manual beds* are usually cheaper. Once you get your initial set up, you can budget the next year for an electrical bed. Other essential equipment should include: *backtable, mayo stand, single and double ring stand, anesthesia machine and stirrups for lithotomy positioning*. The anesthesia machine does not have to work. Students just need to see what they look like and learn to work around them. If you are not able to obtain an anesthesia machine the first year, you should put it into your three-year plan. If you use several clinical sites, you may be able to get one donated as the hospital upgrades their machines. Make sure your mayo stand is the one with a foot control, not the hand control. If your students are scrubbed in they will not be able to adjust a hand control mayo stand. The other essential item is a *mannequin*. This will allow your students to practice positioning, prepping, and draping as well as a variety of other tasks. The best kind to look for is one that has removable internal organs and that has movable joints. The mannequin should also be interchangeable between male and female.

We must not forget what the surgical technologist is doing before the patient comes into the room. You will need to have a *scrub sink*. This could be knee controlled or light sensing. The knee controlled is going to be much cheaper and easier to set up. If you are modifying an existing room, this may necessitate a change in the plumbing.

Some other essential equipment that should be in the laboratory includes: *suction machine, electro surgical unit, autoclave, Steris machine, and endoscopic video tower.*

None of these pieces of equipment needs to work. With more surgeries being performed minimally invasively, endoscopic equipment is becoming an important part of all operating rooms.

Try to acquire as many *instruments* as you can. Some of the basic instruments can be purchased. The essentials include a minor and a major general surgery set up, a gastrointestinal set up, a vaginal and an abdominal OB/GYN set up, a basic genitourinary set up, a cystoscopic set up and a basic laparoscopic set up. If you in your first year and on a tight budget these should be the first instruments you acquire. You may be able to get several instruments donated from local hospitals as they break.

### **Essential supplies**

Supplies will be your biggest budget item. Many of these will need to be purchased every year. Again, think of what is needed from the time you enter that room. You will need *hats, masks, scrub brushes, antiseptic soap for scrubbing, shoe covers.* These will need to be purchased each year. Once your student's scrub they will need to have a gown and gloves to put on. The gloves will probably need to be purchased each year. Disposable gowns can be donated from the hospitals, or you can purchase cloth gowns and have students check them out each year. It is usually more cost effective to purchase cloth gowns than to purchase disposable gowns if the hospital does not have enough disposables.

In order to practice setting up backtables your students will need to have mayo stand covers, backtable covers, an assortment of drapes and small supplies. You may be

able to obtain enough of these through donations from the hospital. If not, they will need to be purchased each year. Most of your small supplies such as bovie's, sponges, sutures, etc. should be able to come from donations from the hospitals.

### **Nonessential equipment**

Some other pieces of equipment that might be considered as your program get established might include:

- IV poles
- Kick buckets
- Orthopedic table
- Rolling chairs/stools
- Simulators to practice actual surgery
- Overhead lights
- Various positioning devices

### **Sources for equipment/supplies**

The following are companies that offer new and refurbished equipment:

- World Medical Equipment ([www.worldmedicalequip.com](http://www.worldmedicalequip.com))
- Ready Medical ([www.readymedical.net](http://www.readymedical.net))
- Heartland ([www.heartlandmeds.com](http://www.heartlandmeds.com))
- Health Quip ([www.healthquip.com](http://www.healthquip.com))
- Health Care Medical Supply, Inc. ([www.hcms.4vet.com](http://www.hcms.4vet.com))

The following are resources for instruments:

- Your local hospital (Sterile processing should have instruments that they no longer want)

- Tisco Surgical Instruments (516-868-2443)
- Mobile Instrument Service & Repair Inc. ([www.mobileinstrument.com](http://www.mobileinstrument.com))

The following are sources for supplies:

- Armstrong Medical ([www.armstrongmedical.com](http://www.armstrongmedical.com))
- The Burrows Company (847-537-7300)
- Pocket Nurse ([www.pocketnurse.com](http://www.pocketnurse.com))
- Briggs Corporation ([www.BriggsCorp.com](http://www.BriggsCorp.com))
- Midwest Medical Supply Company (<http://www.midwestmedical.com>)

The following are sources for Mannequins:

- Pocket Nurse ([www.pocketnurse.com](http://www.pocketnurse.com))
- Anatomical Anatomy & Physiology ([www.anatomy.nimcoinc.com](http://www.anatomy.nimcoinc.com))
- Nasco ([www.nascofa.com](http://www.nascofa.com))
- Armstrong Medical ([www.armstrongmedical.com](http://www.armstrongmedical.com))

The following are sources for cloth gowns:

- Imperial Textile (800-870-4494)

The following are sources for surgical simulators:

- Delletec ([www.delletec.com](http://www.delletec.com))
- Limbs & Things ([www.limbsandthings.com](http://www.limbsandthings.com))

The above lists are certainly not the only sources of equipment/supplies. If you are on a tight budget, start with your local hospitals. Ask for as many outdated items as they have. There are many items that get opened and are not used. Ask the hospitals to keep a box just for the school. You may need to make frequent trips to the hospital to pick it up. Contact Sterile Processing and ask them to save instruments that cannot be repaired.

Many hospitals have a box of instruments that come in disposable kits for the emergency room. These are usually mosquitoes, adsons, iris scissors, etc. They usually don't get used in the operating room. The department may be willing to give you some to get started with.

For some of your big equipment, you can negotiate with the different companies. Some companies will give you good discounts if you are from a school or if you get all of your equipment from them. If your budget is really tight, you may need to arrange for a visit to the local hospital in the afternoons and use their equipment. If you start out with only one operating room set up and 15 students, you can arrange for one group to work in the computer lab or work on other projects. Some can practice scrubbing, while others practice draping or putting on gowns/gloves.