

Medical Devices Center Safety Agreement

The Medical Devices Center is committed to providing a safe environment that promotes innovation and learning. With a variety of diverse laboratory workspaces available for students, faculty and staff, it is imperative that all users of this space adhere to the following guidelines for the safety of everyone.

General Use

- Identify where the first aid kits and fire extinguishers are located before beginning the work.
- Learn where phones are located in case of emergency.
- Always clean the workspace when finished with the activity or project. This includes cleaning up machines, counter tops, and floors that have been dirtied, as well as replacing tools in their proper location.
- Store projects in designated areas. If a storage space is required, notify a lab supervisor and they will locate a suitable space.
- Label work stored in the MDC with the following information using an MDC Project ID Card:
 - Name
 - E-mail address/Phone Number
 - Project Start Date
 - Projected End Date
 - Other Comments (Including Potential Hazards)
- Complete all required safety training mentioned in the following sections.
- No chemicals may be poured down the drain. They must be properly disposed via the Department of Environmental Health and Safety (DEHS) procedure.
- All sharps must be placed in a sharps container not in the garbage.
- The use of this laboratory is a privilege. Please treat the personnel, lab space, and equipment with respect. This will help keep the MDC a clean, safe, and effective place to innovate the medical device field.

Mechanical Prototyping Lab Use

- Wear safety glasses when using machinery and tools.
- Do not use tools without the proper training. If a tool or technique is unfamiliar, please ask one of the lab supervisors to explain and train.
- Only close toed shoes may be worn in the lab.
- Long hair must be tied up in a pony tail.
- Loose necklaces should not be worn in the lab. Rings are permitted, but they may add risk to the wearer.
- For safety reasons, pants and knee-length shorts are the only leg coverings that may be worn in the lab.
- Absolutely no horseplay/pranks allowed in the Mechanical Prototyping Lab.

- Use proper fixtures to drill, mill, and cut. Do not secure the material by hand when performing these activities.
- The stock available in the shop is for small part prototypes only. Project teams must provide their own materials beyond this use.
- If a tool is broken or malfunctions while in use, notify the lab supervisors immediately.
- Inform the lab supervisor immediately if you sustain injury in the MDC, and apply proper first aid.
- **Always clean the workspace when finished with the activity or project. This includes cleaning up machines, counter tops, and floors that have been dirtied, as well as replacing tools in their proper location.**
- Do not remove equipment from lab.
- If working with noisy equipment for an extended period of time wear ear protection
- All heavy machining must be done during the lab supervisors' open hours which can be found on the MDC website.
- While using the lab, the door must remain closed. This will help insulate the center from the noise.

Electronic Prototyping Lab Use

- Wear safety glasses when soldering.
- Be sure to turn soldering irons and power supplies off after use.
- Please inform the lab supervisor if the stock of the electrical parts is low.
- Do not remove equipment from lab.
- Tools must be returned to their proper place after use.
- All power circuits must have a voltage regulator. Do not assume that any power source will give you a correct voltage.
- When using the adhesive station
 - Be sure to check the MSDS for safe handling procedures
 - Wear the UV protective glasses if using the UV cure jet
 - Put down a section of brown paper to protect the table from adhesive spills

Wet Lab Use

All users of the wet lab are required to complete the following training:

- Bloodborne pathogen training
 - http://www.dehs.umn.edu/bio_pracprin_blood_bpt.htm
- Introduction to Research Safety, Chemical Safety, and Chemical Waste Management
 - http://www.dehs.umn.edu/training_newlabsafety.htm

**When the training has been completed, forward the confirmation email to:
beekm008@umn.edu**

- Inform the lab supervisor if an outside chemical is needed for a desired procedure. Have MSDS sheets for the proposed chemicals added to the MSDS booklet. All chemicals must be in a properly labeled container with contact info and name.
- Inform the lab supervisor if tissue experimentation is desired.
 - o Tissue can be stored in the bio-fridge, but will be thrown out after 1 week unless an agreement is made ahead of time.
 - o All tissue must be labeled with contact info, name, and date.
 - o **Tissue Must Be Disposed of in a very PARTICULAR way. Please refer to the tissue disposal.**
- Work surfaces should be sprayed down with 70% isopropyl alcohol solution and wiped down after use. Clorox bleach wipes may also be used.
- Tools that have been in contact with tissue either need to be thrown in a sharps container (scalpel blades, needles, etc...) or washed in the sink with a bleach solution, dried, and put back in the proper place.
- Do not pour any chemicals down the drain. They must be properly disposed of via the procedures outlined in the DEHS website below.
 - o http://www.dehs.umn.edu/hazwaste_chemwaste_umn_cwmgbk.htm

The safety procedures outlined above are implemented to ensure the MDC is a clean, safe and effective environment for all who would use the facilities. Failure to comply with these rules may result in the termination of MDC lab privileges.

I, _____,
 (print name)
 have read and understand the rules of the Medical Devices Center, and I agree to adhere to them.

SIGN HERE _____

DATE _____