

MEDICAL STUDENT POLICY

Title: Anatomy Lab Policies and Procedures	
Relevant LCME Element(s): N/A	Last approved: 3/6/2024

I. PURPOSE

Outlines guidelines regarding the use of cadavers and human body parts in the anatomy lab.

II. PERSONS AFFECTED:

Medical students, anatomy curricular leaders, educational deans

III. POLICY AND PROCEDURE STATEMENT

Students will maintain a professional environment in the Anatomy Lab at all times. Students are expected to follow the below guidelines:

- Treat the donors and all resources in the lab with respect. Feinberg students are required to abide by the following policy regarding the use of cadavers and human body parts for educational and research purposes. If interested in those guidelines, please contact the Anatomy Lab Manager, and additional policies for the 'Use of Cadavers (Donors)' can be provided.
- No unauthorized photography is allowed in the lab.
- No food or drink is allowed in the lab.
- Keep all areas clean and return all instruments and supplies to their proper location. Ensure that all trash is properly disposed in the appropriate bins.
- Lab clothes should be protective; close-toed shoes must be worn, and legs should be covered. The disposable lab coats/gowns and gloves are mandatory whenever working with body donors or pathological specimens. Other PPE (masks, shoe covers) will be provided but are not mandatory.
- Personal belongings should be stored in lockers or designated cabinets in lab. Do not leave personal items anywhere near tanks, on counters, or on the floor.
- No visitors (outside of participants in formal approved FSM programs or authorized by anatomy faculty and staff) are allowed in the anatomy lab to preserve the dignity and respect we have for the donors.

Health & Safety Guidelines and Considerations

When working in any lab, health and safety is of the utmost importance. Without dissection in the anatomy lab, threats to your safety are minimal, but you should be aware of the hazards of the chemical environment. The main consideration is protection from contact with the embalming solution, including excessive inhalation of the fumes.

Chemical Safety

Contents of the Standard Embalming Solution:

Phenol	12.5%	(antifungal/microbial agent and fixative)
Alcohol	25%	(Fixative)
Formaldehyde	2-5%	(Fixative)

Glycerine	25%	(softener)
Water	35%	

Material safety data sheets for each chemical in the solution are available upon request. Formaldehyde is classified as a potential human cancer hazard by OSHA, and phenol a poison. In concentrated form, both formaldehyde and phenol have corrosive effects on skin and respiratory passages. Students may experience irritation and inflammation of the respiratory passages, headache, nausea, dizziness, breathlessness or skin rashes, irritation, or numbness. Eye contact with formaldehyde and phenol can cause severe, irreversible damage, but at the concentrations in the embalming fluid, irritation is the likely result.

Extensive air testing of the Tarry basement laboratory during class in 1994, 2010, and 2018-19 showed formaldehyde levels to be within stringent OSHA 8-hr. PEL (Permissible Exposure Levels) standards. Phenol levels have also tested within OSHA standards. Air monitoring for both chemicals will continue. Student exposure to the chemical environment is transient, the concentrations are low, and we have experienced no serious health problems in the past. Every student, though, must be aware of the possible hazards and make every effort to protect themselves.

Routes of Contamination: 1) skin contact. While damaging to the epidermis, chemical vapors and liquid can readily pass through the skin as a pathway for internal exposure. 2) Inhalation: this is the most significant route for internal exposure. 3) Cross-contamination. Touching objects like clothes, doorknobs, food, etc. that have been contaminated by the chemicals.

To reduce or avoid these routes of contamination, take a few simple safety precautions:

- Dress Properly. Wear the provide disposable gowns, nitrile gloves, masks, and shoe covers for each live lab experience. And wash your hands thoroughly at the end of your session.
- If any symptoms of chemical exposure are experienced, or if you have any concerns about potential chemical exposure, please inform the faculty, or a nearby instructor, as soon as possible. If a skin rash develops, further protect the affected area, which is usually the wrist or the forearm. If any irritant gets in the eyes, flush them thoroughly at the eyewash stations. If nausea, dizziness or other internal symptoms occur, walk away from the dissection area or leave the laboratory until you recover. Avoid long periods of close-up dissection. Rotate dissection duties among the group members.
- It must be emphasized that the hazards indicated above are for typical dissection labs with the entire class present. Your exposure will be minimal due to the small number of students present in each session, the absence of dissection, and the small number of cadavers that are exposed at their tanks. The largest source of chemical fumes in the lab is evaporation from open tanks (fluid accumulates in the body bags and the bottom of the tanks).
- If you are pregnant or breast feeding, it is important to take additional precautions in the lab space due to potential chemical exposure – please inform faculty or the Anatomical Lab Manager. Relevant additional information can be provided, as well as connection to the Office of Research Safety for options and recommendations for accommodations.

Guidelines for Authorized Photography

As noted above, no unauthorized photography is allowed in the lab. Any use of photography in the lab must be approved by the Anatomy Lab Manager. All approved photography should abide by the below guidelines stipulated by the Anatomical Gift Association of Illinois:

Guidelines for the Use of Digital Images of Cadavers or Other Human Material obtained from the Anatomical Gift Association of Illinois

Approved by AGAI Executive Committee 3/31/2020

Several factors make it necessary for the AGAI to issue *Guidelines* to regulate use and storage of cadaver images.

1. The donors and their families did not explicitly consent to use of the cadaver material for anything other than education and research.
2. It is likely that the public would find both the images themselves and their public dissemination to be offensive, inappropriate, and upsetting.
3. Offense at public dissemination of cadaver images could result in significant negative reaction to, and damages to The Anatomical Gift Association of Illinois and all medical schools in Illinois. These damages could include:
 - a. decreasing public respect and confidence in the health professions;
 - b. decreasing donations;
 - c. legal liability.
4. Offense at public dissemination of cadaver images could also affect the responsible individual, including negative impact on their professional reputation and career, as well as legal liability.

With these considerations in mind, the AGAI is issuing the following guidelines regarding the use of cadaver images.

1. All Universities/Colleges receiving materials from the AGAI should have a policy that:
 - a. refers to and is consistent with these *Guidelines*;
 - b. is approved by the University's/College's Office of Legal Counsel;
 - c. explicitly delineates appropriate collection, use and security of images of cadavers;
 - d. specifies that failure to strictly adhere to these policies may result in disciplinary action.
2. Electronic images can only be made with the knowledge of and under the guidance of an Instructor.
3. Electronic images can only be made using equipment provided by the University/College.
4. Electronic images must:
 - a. be transferred over a secure network
 - b. be stored on equipment and websites owned and/or administered by the University/College or its official designees (e.g., employees/instructors or agents), behind a firewall, encrypted, and password protected following the University/College policies;
 - c. have their access permissions set so as to prohibit download, transfer or copying.

5. Electronic images must only be accessible to current students or employees of the University/College who:
 - a. have a professional interest in the material;
 - b. have acknowledged in writing their understanding that the electronic images may be used only in the applicable course and in accordance with the University/College policies governing their use.

The following uses should NOT be allowed:

1. Making or transferring images of parts of cadavers that might be easily identifiable, including but not limited to undissected faces, scars, tattoos, and finger nails with nail polish;
2. Making or transferring images of cadavers to electronic devices not owned and/or under the immediate control of the University/College, including, but not limited to, students' phones, cameras, and iPads;
3. Making or transferring images of cadavers to electronic devices that are not password protected and encrypted.

IV. REVISION HISTORY:

3/6/2024: Updated health and safety guidelines.

V. APPROVING BODY:

Curriculum Committee