

Medical School Laboratory Safety & Hygiene Plan for Reactivation of Wet/Bench Research Laboratories

Please read entirety of document and complete yellow highlighted areas. Submit document to your department for review and approval. The signed document should be uploaded into the Safety Section of the Medical School Laboratory Space Usage Form.

Faculty Name:	Max Shtein
Uniqname:	mshtein
Emergency Phone Number:	734-355-5584
Department:	Materials Science and Engineering
Building:	NCRC Building 28
Room(s):	Bldg. 28: Rm. 3129W, 3039S, 3105C

Responsibilities

Individuals

Individuals are responsible for reading and complying with U-M's Guidelines for Safe Lab Work. Individuals should remain at home if they are sick or report signs of illness if symptoms develop during the work day. Individuals [at risk](#) are not required to return to work. Every person must wear a mask. Although the institution will provide a cloth mask, it is ultimately the individual's responsibility to retain the mask, bring it to work daily, and comply with applicable cleaning and care instructions.

Laboratories

Principal Investigators (PIs) are responsible for reading and complying with U-M's Guidelines for Safe Lab Work. PIs will provide gloves, disinfectants and scheduling of personnel to maintain proper density to adhere to social distancing measurements to protect individuals. PIs are responsible for creating a compliant culture that supports the safety of all personnel.

Department Leadership

Departmental leadership will be responsible for enforcing policies and guidelines as they have a greater awareness and control of the local setting.

Medical School

The Medical School will be responsible for providing building access and screening entrants. Employees authorized to return to work will be provided a cloth face mask and instructions on cleaning and maintenance. The Medical School will monitor compliance and impose sanctions up to and including suspension of building and laboratory access.

Schedule

Each lab must devise an online scheduling system for signing up for and signifying who is present in the space to control the number of personnel in the lab at the same time. All analysis and other work (e.g., lab meetings, journal club, supervisor meetings, etc.) that can be done from home are required to continue to be done remotely. This includes research operations for dry laboratories and office work.

It is critical that lab safety be maintained. Per the [U-M Chemical Hygiene](#), it is not prudent to work alone in a laboratory with hazardous materials or procedures. Whenever working in the laboratory, others should be actively aware of your activities.

Shtein lab will start a Google Calendar to sign up for times when in the lab which will include equipment to be used based on the zones provided in the floor plan. More than one person will not occupy the Optics lab (B28-3039S) at any one time.

Laboratory Safety & Hygiene Schedule

List duties to be performed by personnel, especially responsibilities for cleaning and disinfecting noted in the other sections of the safety & hygiene plan. Indicate the designated time of day and location for such duties to be completed.

Time	Person	Duties (disinfect the listed with 70% ethanol)	Lab Location/Room
Morning (9 am)	Cecelia Kinane	Wipe down common spaces in main lab area as used	Zone 5-8/B28-3129
Mid-day (12pm)	Brian Iezzi	Optics lab (microscope and	Zone 1-3/B28-3039S

		printing area)	
Afternoon (3 pm)	Erin Evke	Wipe down common spaces in main lab area as used	Zone 1-4/B28-3129
As needed	Brian, Cecelia, Erin	Wipe down equipment as used (coordinate with Nagrath and Mehta lab)	All zones/B28-3105C

Note: Graduate student lab engagement should follow [Rackham Guidance](#). Specifically, the manner in which graduate students return to research in the laboratory should be mutually agreed upon by faculty member/PI and the graduate student.

Density and Social Distancing[1]

The approved laboratory occupancy sign will be posted on the door of the laboratory or in an easily visible, public location. A laboratory map will be posted inside the entryway to show work flow patterns and personnel work spaces that adhere to social distancing parameters.

Laboratory work space will be configured to ensure social distancing. Tape or other visual cues will be used to mark out 6-ft. measurements, especially in high traffic or bottleneck areas. Equipment will be moved to create at least 6 ft. between users.

Note: The most typical configuration of two desks side-by-side at the wall side of a bench likely precludes more than one person sitting at a desk at a time because appropriate distances cannot be maintained.

Small procedure rooms (e.g., imaging, tissue culture, surgery) will be limited to one person at a time. The door should be shut when occupied if the experiment allows.

Additional Laboratory-Specific Density/Social Distancing Actions

List any additional specific precautions needed for your laboratory due to the unique aspects of your research, room configuration, variances from standards above, or other extenuating circumstances.

We will establish a common calendar to schedule/monitor personnel present in the lab and for use of common instruments. Only one person will occupy a zone at a time and will be responsible for wiping down the surfaces before and after use.

Laboratory Hygiene

Personnel will wash their hands with soap and water for a minimum of 20 seconds upon arrival in the laboratory and several times throughout the day.

Lab personnel will wear their personal masks in the laboratory and common areas (halls, restrooms). Masks will be washed after each day's use following EHS [Face Covering Usage for COVID-19](#).

Personnel, as noted in the Laboratory Safety & Hygiene Schedule above, will be assigned to wipe down lab benches and other items handled by others (e.g., handles, light switches, refrigerators, telephones, stools/chairs) with 70% isopropanol, ethanol or other EPA-registered disinfectant at least daily and between personnel changes following [EHS guidelines](#). Sanitizing activities will be noted on a log in a place that is easy for personnel to record and see.

A sign-up calendar will be developed for common/shared equipment. Before using common equipment, hands will be washed and new gloves donned. When removing gloves, proper technique will be used to keep dirty to dirty and clean to clean. Wash hands after removing gloves. Good technique for degloving will be employed.

https://www.youtube.com/watch?v=xTYioOo__6U

<https://www.youtube.com/watch?v=YfGivTv3wbc>

Common equipment will be cleaned before and after use ([EHS Guidelines](#)). Some manufacturers have also posted guidelines of how to disinfect their products; these should be consulted to avoid damaging delicate instruments. Disinfection activities will be noted on a log that is easy for personnel to record and see.

Additional Laboratory-Specific Hygiene Actions

List any additional specific precautions needed for your laboratory due to the unique aspects of your research, room configuration, variances from standards above, or other extenuating circumstances.

Lab doors will be kept closed at all times. Laboratories have increased ventilation rates for safety, and are maintained under negative pressure relative to surrounding spaces. Propping doors open impairs the effectiveness of the ventilation system and is also in violation of fire and life safety codes. A sign will be posted at this door indicating who is in the lab at that time (advance notice will be given via a group calendar). Kim wipes will be used to touch door handles.

Common Areas

Most common areas, e.g., conference rooms and some lunch rooms, will be closed. For any that may remain available, usage will be minimized and break periods will be staggered to mitigate contact with others. Faculty will work with their local colleagues or the Department to establish a schedule for break periods that minimize occupants as any one time. Hands will be washed before and after breaks. Chairs will be positioned to enforce social distancing. This is particularly important in areas where food is being consumed as wearing masks is precluded. Personnel using common areas should disinfect area before and after each use.

Food breaks will be eaten off the premises or outside the buildings maintaining a minimum of six feet distance.

Meetings

The laboratory will continue to hold meetings with Zoom or BlueJeans to reduce personnel density on the premises.

Enforcement

The PI and research team will self-monitor adherence to U-M guidelines and compliance with the safety and hygiene plan described herein.

Department leadership will enforce U-M guidelines and the safety and hygiene plan described herein.

Personnel can report lab safety issues, including personnel who are ill or not following safety protocols, via the [U-M compliance hotline website](#). Concerns can also be reported by calling 866-990-0111 or contacting EHS at 734-647-1143 or emailing [EHS](#).

Principal Investigator Signature
Date

Date

Department Signature

[1] U-M guidelines require each laboratory/room can accommodate a maximum of 1 person per 144 sq. ft. and requires all personnel to maintain at least 6 feet of space between them as they work.