

MCP Return to Research Plan

Locations and Responsible Parties

Program: Materials Characterization and Processing

Program Director: Mitra Taheri, mtaheri4@jhu.edu, O: (410) 516-8145

Locations: Olin Hall 106, 101, 130, 206, Suite 139 (rooms 140, 141, 142, 143); Maryland Hall B45, B45A.

Olin Hall MCP Contact 1: Ken Livi, klivi@jhu.edu, C: (410) 746-4136

Olin Hall MCP Contact 2: Sam Norris, snorri13@jhu.edu, C: (412) 245-6454

Olin Hall Building Contact: Sarah Horst, sarah.horst@jhu.edu, C: (520) 204-6719

Maryland Hall MCP Contact 1: Phil Chapman, pchapma2@jhu.edu, C: (802) 878-4130

Maryland Hall MCP Contact 2: Sam Norris, snorri13@jhu.edu, C: (412) 245-6454

MCP Administrative Contact: Ellen Libao, elibao1@jhu.edu, C: (443) 857-5362

Personnel:

Name	Training	Email	Cell Phone
Ken Livi	Dir. Op.	klivi@jhu.edu	(410) 746-4136
Sam Norris	Staff	snorri13@jhu.edu	(412) 245-6454
Phil Chapman	Staff	pchapma2@jhu.edu	(802) 878-4130
Mitra Taheri	Dir.	mtaheri4@jhu.edu	(412) 512-6421

Authorized users of MCP facilities will be registered and briefed on our SOPs when they book instrument time.

Physical Distance Plan

Room Number	Square Footage	Number of Individuals at a Time
Olin 101 – Utility Room	614.88	1 MCP Staff Only
Olin 106 – Prep Room	303.62	1
Olin 130 - Office	198.15	1 MCP Staff Only
Olin 139 – Suite Hallway	150.53	Only used for access
Olin 140 – Utility Room	144.83	1 MCP Staff Only
Olin 141 - TEM	422.23	1
Olin 142B - microCT	289.69	1
Olin 142A – Utility Room	132.74	1
Olin 143 - FIB/SEM	444.10	1
Olin 206B - Computer Lab	440.25	1
Maryland B45 – Polisher	286.75	1
Maryland B45A - XRD	460.11	1

Total Occupancy Limit: MCP@Olin Hall: (see map)

Access to the MCP@Olin suite is through the loading dock at the rear of Olin Hall. The suite includes rooms 141, 142a,b, and 143 and the Staff office 130, along with the prep lab 106 and computer room 206B. At one time, a maximum of 5 people will be allowed in the MCP@Olin suite. Only 1 person is allowed in each of the instrument, computer and prep rooms.

One MCP Staff person will be on site on Homewood Campus at a time. Ken Livi and Sam Norris will use Olin 130 as their office, though not simultaneously. Phil Chapman will be stationed in his Maryland Hall office. The active MCP Staff person will be assigned on a rotating basis.

Total Occupancy Limit: MCP@Maryland Hall: (see map)

Occupancy in Maryland Hall is limited to 1 person in the polisher lab (MD 45), and 1 in the XRD lab (MD 45A).

Traffic Flow and Barriers: (see map) All MCP users and staff must use the rear loading dock door to Olin Hall. The FIB/SEM will be accessed by the door to the hallway. The TEM and microCT will be accessed through the suite door. Doors to all rooms will remain closed with a note posted when a user is in a room. Users must indicate if the room is in use or vacated. MCP users are restricted to the first floor, except if using the computer room 206. MCP users can only use the first floor bathrooms even if they are occupying room 206B. Users are restricted to the rooms they signed up for.


Maryland Hall B45 & B45A may be accessed thru the respective hallway doors or thru B05A, but will always exit to the hallway per posted signs. Users are restricted to the room they signed up for.

Access and Booking Logistics

- Existing trained users of the MCP labs will be able to reserve time on our instruments. Training of new users and in-person training for special applications will not be available for the time being.
- The MCP iLab scheduler has been in use for two years and will be the main tool to keep track of room occupancy. All MCP users have access to the iLabs scheduler, which is available online at: <https://johnshopkins.corefacilities.org/landing/42>.

☰
Kenneth Livi ▾ Help Sign Out ↗

WSE The Materials Characterization and Processing Core (MCP)


JOHNS HOPKINS
WHITING SCHOOL
of ENGINEERING

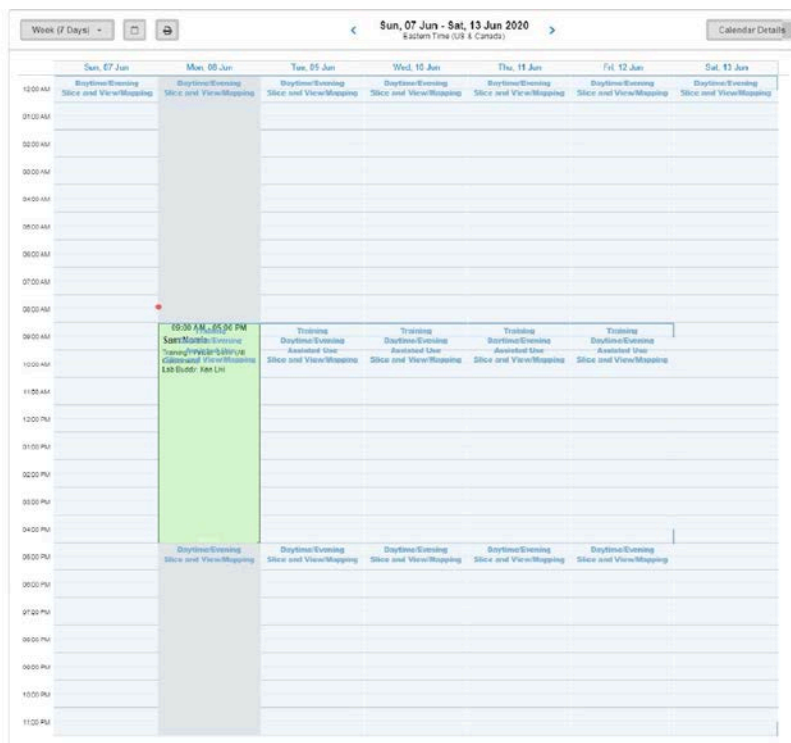
About Our Core
Schedule Equipment
Request Services
View All Requests
Reservations

Schedule Resources

Go to Kiosk

- ▶ [Consultation \(1\)](#)
- ▶ [Electron and X-Ray Analysis \(2\)](#)
- ▶ [Mechanical Testing \(1\)](#)
- ▶ [Sample Preparation \(3\)](#)
- ▶ [FIBSEM \(1\)](#)
- ▶ [Micro CT \(1\)](#)
- ▶ [TEM \(1\)](#)
- ▶ [XRD \(1\)](#)

iLabs Entry Page used for scheduling room occupancies.



Example of iLabs schedule page used to schedule each instrument, prep labs, and computer room. Each instrument/room has its own schedule.

- iLab reservations for the polisher and XRD must be approved by MCP staff to ensure there are no lab occupancy conflicts (as these tools are in labs that contain both MCP and non-MCP equipment). All people entering MCP rooms must have an instrument reservation, or if staff, a scheduled maintenance visit.
- Instruments must be booked in time slots of at least 4 hours (including lab cleaning time), with the University-recommended lag time in between bookings.
- MCP staff will monitor the booking calendars and interlocks to ensure compliance. iLab bookings may be extended or started early only by approval of the Lab Manager.
- Bookings must end promptly and time to disinfect workspace should be included at the beginning and end of time in lab. Night and weekend booking are available only to preapproved users with previous after-hours access. It is essential that a “Virtual Lab Buddy” be active for evening hour use.

Lab Buddy

- The occupant of any lab will be required to have an appointed “virtual” lab Buddy who will be listening/checking in on the lab occupant to ensure that they are safe. The Buddy may be another member of the researchers group, or if available, an MCP Staff member. The Buddy need not be in the building unless required per university policies on working alone in research laboratories. Phone numbers of MCP Staff and a dedicated Olin Hall Buddy will be listed at each instrument for emergencies. The job of the Buddy is to be available if there is a problem in the lab AND to check in at regular intervals (30 mins) to make sure the user is safe. A dedicated computer will be provided in each of the instrument rooms and the prep labs in Olin Hall. The user may also use their cell phone, but care must be taken to ensure sufficient charge is available on the phone to last the session. The occupant is required to set up their own Buddy session. MCP Staff may be available to be a Buddy, but the MCP does not guarantee availability.
- The dedicated computer will host Zoom meetings and should be accessible by MCP staff and lab buddies, and used for instrument troubleshooting, communication, and checking in only.

Additional Protective Measures:

- Gloves and masks should be worn at all times and preferably donned before entering buildings.
- Users that will perform operations requiring safety glasses or goggles, should bring their own eye protection (sharing is not recommended).
- Preparatory work should be minimized to sample mounting, loading, and unloading. When possible, users should mount their samples with personal supplies and tweezers. When possible, data processing and analysis should be done remotely.
- Since Olin Hall also houses EPS labs, MCP users will be restricted to the first floor, including the first-floor loading dock entrance. The MCP will coordinate with EPS to ensure minimal contact in shared spaces. All MCP users will agree to participate in the Slack Channel established by the EPS. Bathrooms will be assigned to MCP users and indicated by signs, and will follow bathroom cleanup protocols indicated on signage.

Primary Points of Contact:

TEM: Ken Livi, Olin Hall

FIB/SEM, computing resources: Sam Norris, Olin Hall

microCT, polishers, XRD: Phil Chapman, Olin Hall & Maryland Hall

Staff and User Responsibilities

- **Cleaning/Housekeeping**
 - Users must follow cleaning protocols at the beginning and end of each session. These will be posted in each instrument lab.
 - Staff will follow a thorough cleaning protocol weekly.
 - Stations containing 70% ethanol and paper towels will be at each external lab entry point
 - Wipe down all contacted surfaces with disinfectant, including computer tables, chair (nonporous), monitors, microscope surfaces, prep bench.
 - It is preferable that users have their own compatible keyboard and mouse. If a public keyboard and mouse are used, PPE gloves are required. Where possible, easily cleaned keyboard covers will be acquired. Where only one uncovered keyboard is necessary, this will be cleaned before and after use.
 - Doors may not be propped open, but door handles should be cleaned at the beginning and end of each shift.
 - Biohazard trash boxes will be sealed with tape, labelled, and placed in common hallway area when half-full. They will be collected by housekeeping, as usual.
- **PPE**
 - Gloves will be available outside the suites access doors.
 - JHU should distribute face masks
 - Gloves are required for touching common equipment such as tweezers, knobs, keyboards, mouse, and doorknobs, cabinets, chairs, light switches, and cleaning supplies.
 - It is preferable to wear a personal lab coat.
 - Users that will perform operations requiring safety glasses or goggles, should bring their own eye protection (sharing is not recommended).

COVID-19 Symptoms

- **Before coming to lab, check yourself for COVID-19 symptoms:** fever, cough, shortness of breath, or difficulty breathing (see full list of symptoms at: <https://www.hopkinsmedicine.org/coronavirus/covid-19-self-checker.html>)
- If a user has any symptoms they are required to stay at home and notify their shift captain, lab captain, PI, and the MCP staff.
- Avoid spreading COVID-19 to others by staying home for at least 14 days if you or someone you have come into close contact with is experiencing COVID-19 symptoms.
- University provided COVID hotline should be utilized for further instructions. **Students must call the University Health Services at 410-955-3250 or Student Health & Wellness at 410-516-8270 and Employees must call the Employee COVID-19 Call Center at 833-546-7546 if you are experiencing symptoms or if you have had contact with someone who has been diagnosed as COVID-19 positive in the past 14 days.**

Reporting

- **There will be zero tolerance for violation of COVID-19 workplace safety guidelines.** Noncompliance with current will result in suspended laboratory access for a period of 1-4 weeks, depending on the severity and frequency of the infraction.
- Report abuse/problems/concerns to the PI/lab captain, MCP Staff, or through university provided channels:
 - closecalls@jhu.edu for simpler, non-incident, issues
 - SPEAK2US hotline at <https://secure.ethicspoint.com/domain/media/en/gui/65464/index.html> or 844-773-2528 for equity relates issues
 - Health, Safety and the Environment office (410 516 8798) for lab safety reporting

Communication Plan

- Any technical issues with instruments should be reported to respective MCP Staff. Remote troubleshooting will be attempted when possible. If onsite troubleshooting or repair is necessary, coordinate with MCP staff to schedule and rebook time.
- Any concern with PPE, cleaning procedures, or distancing policy should be addressed to MCP staff immediately

Positive Test Contingency

In the event that an individual using the lab is positively identified to have COVID-19:

- The sick individual and everyone using that lab will do a mandatory self-quarantine for 14 days.
- All other lab members will participate in daily symptom reporting for a week.
- The entire lab will be cleaned by HSE prior to continuation of work by others.

Laboratory Disinfection Protocol

1. **Wash hands** with mild soap and warm water for 20 seconds. **Dry hands.** Alternatively, use hand sanitizer.
2. **Disinfect laboratory surfaces using disinfectant (70% EtOH).** For consistency, reproducibility, and chemical compatibility, multiple disinfectant use should be avoided.
 - a. Disinfect all frequently touched surfaces and objects.
 - b. ***If there is visible chemical/other residue on a surface, first remove residue with a separate cloth wetted with water and allow surface to dry before attempting to disinfect***
 - c. Spray/apply disinfectant directly to new cloth- minimizing aerosol generation of disinfectant; wipe working and high contact surfaces with cloth- benchtop, fume hood bench and sash, cabinet handles, refrigerator handles, door handles, sink handles, computer keyboard and mouse, etc. On certain electronic devices, several lighter applications with dampened disinfecting cloth may be necessary to reduce damage to the device.
 - d. ***Apply enough disinfectant to thoroughly wet surfaces and allow disinfectant to air dry, ensuring that the manufacturers recommended contact time is met***
 - e. Disinfecting cloth may be reused until grossly soiled. Dispose of grossly soiled cloths in bio box.
 - f. When you complete the cleaning/disinfecting process, remove nitrile gloves and dispose into biohazard waste box, wash hands.
 - g. ***Do not switch between different disinfectants and/or bleach***

- h. You may wish to exit the room while the disinfectant vapors dissipate.
- i. Begin research!

While Performing Laboratory Activities

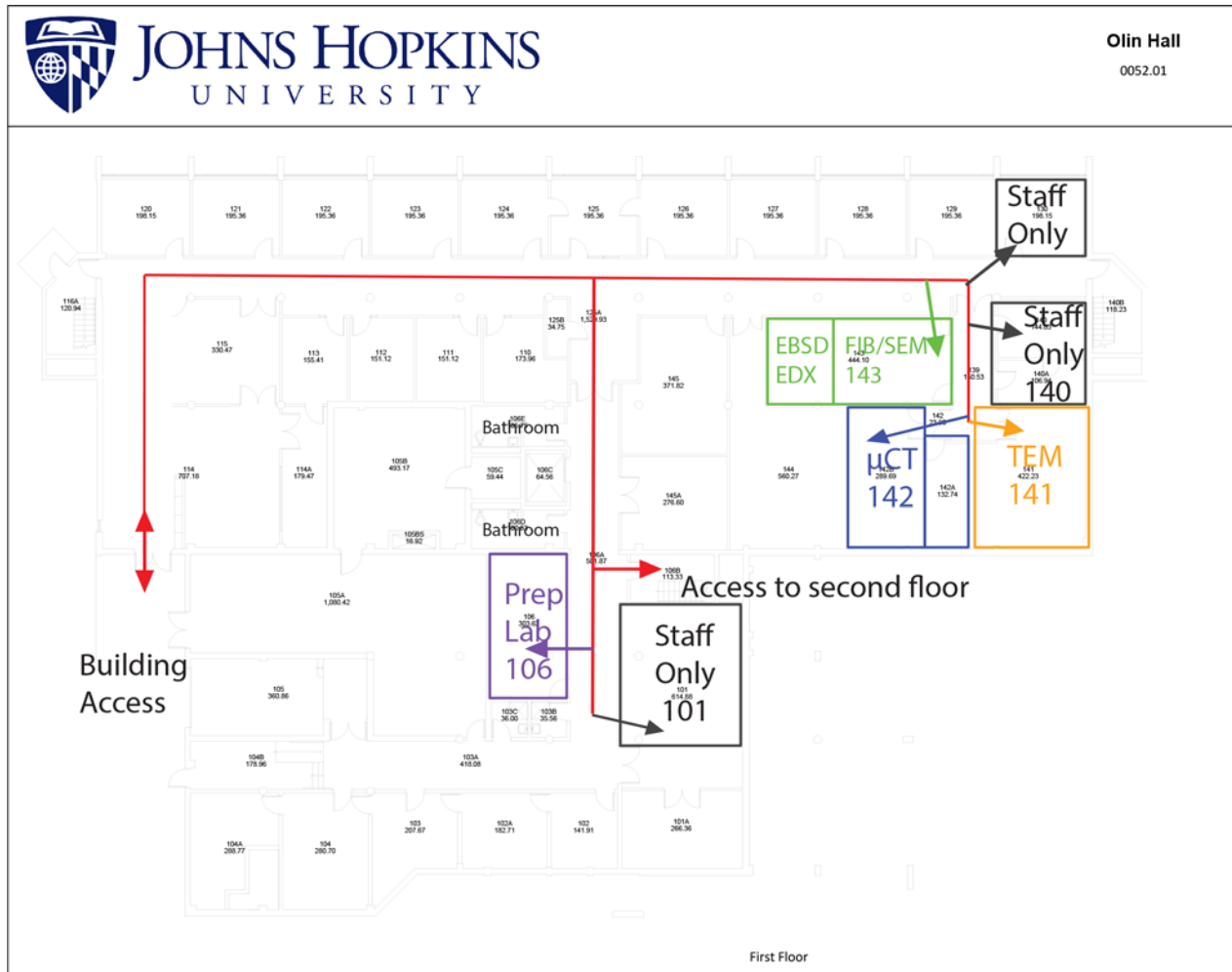
1. **Maintain social distancing** of 6 feet between other researchers.
2. **Continue to wear mask** (Note: Cloth masks are being worn based on state public health requirements for masking, not to protect against hazards in the lab. Tasks where potential respiratory exposure to hazardous chemicals, biologicals and radioactive materials must be done in fume hoods and/or biosafety cabinets. Follow existing JHU health and safety PPE [policies](#).)
3. **Wash hands** anytime you leave the lab, after you touch shared items, before AND after using the restroom.
4. **Do not touch your eyes, nose, or mouth.**
5. **Monitor your symptoms throughout the day.** Immediately leave laboratory and alert your PI if you develop symptoms at work. Contact your COVID Call Center for guidance.

BEFORE Leaving the Laboratory

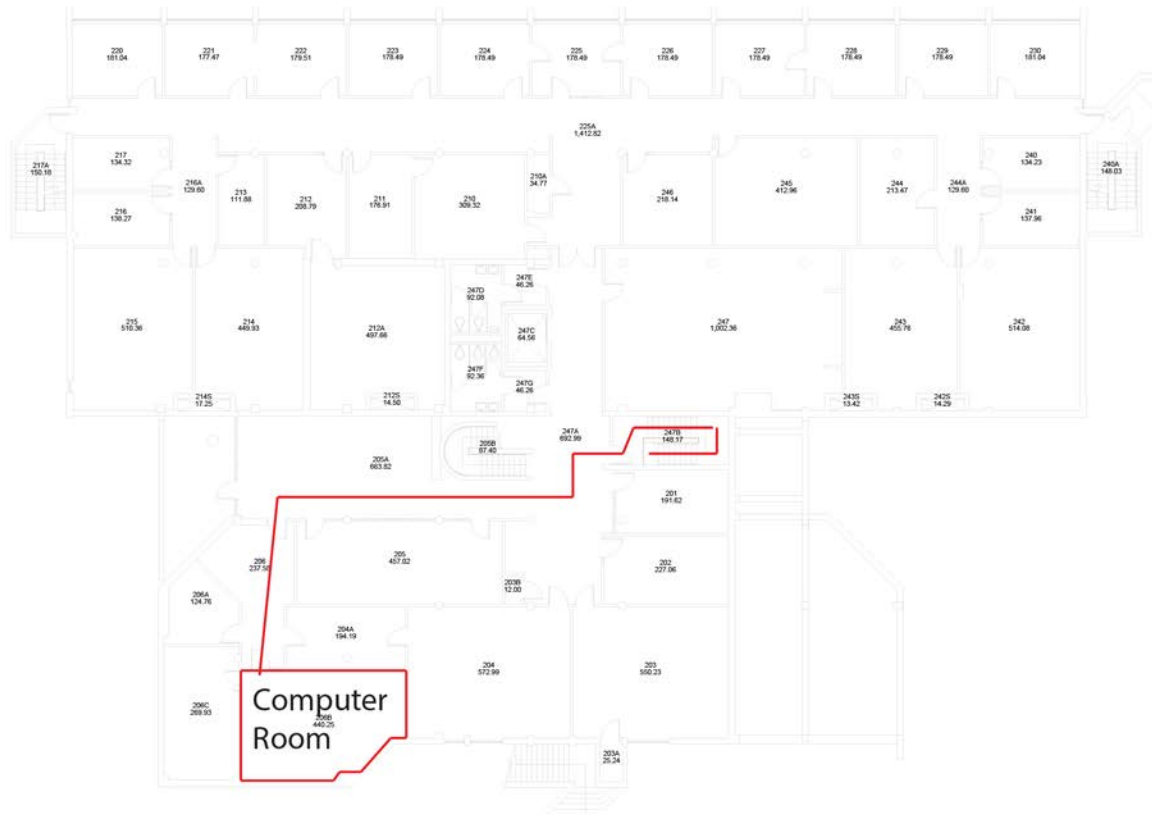
1. **Disinfect laboratory surfaces using 70% EtOH.**
2. **Disinfect any personal item you handled in the lab such as mobile phones and computers.**
4. **Remove gloves** and dispose in lab trash box.
5. **Wash hands** with mild soap and warm water for 20 seconds. **Dry hands.** Alternatively, use hand sanitizer.

Appendix A: Laboratory Floorplans

MCP at Olin Hall First Floor.



Entry into Olin Hall is through the loading dock doors with JCard Access. Unless using the computer room 206B, access to Olin Hall is restricted to the first floor along red line. Each of the colored rooms requires iLab signup. Physical distancing is required while in hallways. MCP users must use the first floor bathrooms only.



Second Floor

Entry to second floor is from first floor only. MCP users cannot use the front door of Olin to get to room 206B. Computer room users must use the first floor bathrooms.



Appendix B: Lab Cleaning Checklist

Did you remember to:

- Wear your mask?
- Place/remove “occupied” tag on door?
- Wipe down:
 1. Keyboards
 2. Monitors
 3. Desktop
 4. Chamber door
 5. Sample mounting area
 6. Gas bottle knob
 7. Doorknobs
 8. Anything else you touched!

Thanks!