Standard Operating Procedures for Safety – Electron Microanalysis and Imaging Laboratory (EMiL)

The EMiL currently completes “Time-sensitive” research that is related to grants, career progression, and student progress through degrees.

Essential Researchers for the EMiL
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And other designees after training.

Health and Physical Distancing
1. The lab will require all employees to take their temperature prior to coming to campus (and therefore the lab) and are required to stay home if their temperature is over 100˚ F (37.8˚C).
2. Lab users should self-monitor their health and stay home if they experience any symptoms relating to COVID-19. The lab manager reserves the right to make this determination if the lab user appears symptomatic.
3. Anyone exhibiting symptoms of COVID-19 or any flu-like illness will be required to seek medical care and are encouraged to self-report to the PI for contact tracing.
4. Any personnel returning from out of state must follow current guidance prior to reporting to campus – these individuals should work from their place of quarantine to the greatest extent possible if they are asymptomatic.
5. Soap, paper towels, and hand sanitizer are provided near the sinks, and a first aid kit is provided on the top shelf of room 1113.
6. Wash hands after entering the lab with soap and water for 20 seconds. Wear lab gloves during the operation of the instrument.
7. Physical distancing of 6 feet will be maintained while working in the lab
8. Use entrance door SEB1119 to access EMiL rooms.
9. No lab user is compelled to work in the lab; such work is the personal decision of the user and is contingent upon approval of the PI.

Personal Protective Equipment (PPE)
10. Lab PPE are in adequate supply and will be provided by the EMiL. Ask PIs what PPE you need. All lab users are encouraged to provide their own reusable PPE.
11. Face covering and gloves are the required PPE for working in EMiL. Face covering and gloves must always be worn in the lab, or while completing tasks outside of the lab that are considered normal lab functions (e.g., gas cylinder pick-up and drop-off in the SEB loading dock, or while transiting common areas of SEB).
12. Lab access will be suspended if adequate supplies of PPE are not available.
13. PPE should not be shared or re-used unless it is designed to be reusable.
**Room Capacity**

<table>
<thead>
<tr>
<th>Room</th>
<th>Description</th>
<th>Max. Capacity</th>
<th>Responsible for Enforcing SOPs and Cleaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1111</td>
<td>SEM</td>
<td>2</td>
<td>Ren</td>
</tr>
<tr>
<td>1112</td>
<td>EPMA</td>
<td>2</td>
<td>Ren</td>
</tr>
<tr>
<td>1113</td>
<td>FESEM</td>
<td>2</td>
<td>Ren</td>
</tr>
<tr>
<td>1110</td>
<td>Sample preparing area</td>
<td>2</td>
<td>Ren</td>
</tr>
</tbody>
</table>

*not all three labs will be used at the same time, lab manager will arrange the schedule of the lab usage

**Cleaning Protocols**

15. Work surfaces used will be decontaminated using 70% ethanol, bleach solutions at 1000 parts per million [ppm] (0.1%) for general surface disinfection, or equivalent EPA-approved disinfectant that is effective against COVID-19 ([EPA-approved disinfectants](https://www.epa.gov/clean-water/disinfectants)), following disinfectant contact times, at the start and end of all laboratory work, including but not limited to: Common use benchtops and desktops • Equipment handles and latches • Computers, keyboards, and mouse attached to instrumentation • Equipment controls and touchpads • Drawer, cabinet, refrigerator, and freezer handles • Hand tools • Chemical bottles and lids • Chair backs and armrests • Pens and whiteboard markers • Shared phone in the laboratory

16. Wear appropriate PPE when using cleaning/disinfectant products.

17. Documentation of commonly used surfaces will be accomplished using a printed cleaning sheet maintained in the lab.

**Lab scheduling**

18. A lab schedule will be through lab manager and implement in a Google Calendar. The schedules will be maintained and approved by Dr. Ren.

19. Graduate students are strongly encouraged to work at home rather than in their offices, and if working in their offices, to stay > 6 feet apart.

20. All lab use will be logged in the Lab-User-Log in order to trace contact should someone become sick with COVID-19.

**Policy on Granting Laboratory Access**

21. Users, other than the Essential Researchers, are required to request access to the lab facility. Access will be granted to those that can demonstrate the facility is required to complete time-sensitive work relating to degree progress, grants, ongoing research projects, or career advancement, and will be prioritized accordingly by the PIs.

22. Failure to follow these SOPs as determined by the lab PI(s) will warrant exclusion from the lab and revocation of key card access to the lab, and possibly SEB.
Each user must sign that they have read, understand, and will abide by these SOPs for Safety and also follows VPRED laboratory safety policies.

I, ____,
acknowledge that I have read and agree to abide by the Standard Operation Procedures for Safety described above.

Signature, __,  

Date 06.02.20 __________________________
Principal Investigators (PIs), researchers, staff, students, and visitors are reminded of the following laboratory policies when working in the VPRED facility laboratories. Failure to comply with the policies outlined in this document will result in lab personnel being asked to resolve the violation or to leave the laboratory. Subsequent policy violations will result in laboratory suspension of the offending individual until retraining to laboratory safety policies has been completed. Chronic disregard to laboratory safety policies will result in the individual's loss of access to the research laboratory.

**Lab Attire and Lab Personal Protective Equipment (PPE)**

- Long pants and closed-toe shoes required in all laboratories containing chemicals, regardless of work being performed.
- Lab coat, safety glasses, gloves, and other PPE are required based on the work being performed and are specified in the lab Standard Operating Procedure (SOP) or protocol.

**Food/Drink**

- No food or drink may be consumed, stored, or disposed (including empty containers) in the laboratory.
- No use, storage, or disposal of smoking or tobacco or vape products is permitted.
- Cosmetics (including lip balm) may not be applied in the laboratory.

**Lab Security/Safety**

- Lab doors must not be propped open and unattended to the service hall or main hall for any reason.
- Individuals without training or without authorized access (i.e., no proximity card) are not permitted into the laboratory unless they are escorted by the PI (or designee).