

## Stages of PARADIM Reactivation – 6/25/2020

Based on general guidance from Cornell and JHU, CAU provides remote support for Theory and Simulation

	<p><b>Closed:</b>  <b>MBE, EM, Bulk</b>  <b>started 3/18/2020</b></p>	<p><b>Stage 1</b>  <b>External users via remote access or by mail</b>  <b>Cornell: On-site access for selected staff (May 29) and local users (June 4)</b>  <b>JHU: Full user remote operations with local staff assistance (June 20)</b></p>
<b>Who</b>	<ul style="list-style-type: none"> <li>Selected staff members</li> </ul>	<p><b>Well-trained personnel only</b></p> <ul style="list-style-type: none"> <li>Scientific staff</li> <li>Experienced local and in-house researchers (no on-site training!)</li> </ul>
<b>What &amp; How</b>	<ul style="list-style-type: none"> <li>Equipment monitored remotely</li> <li>Occasional walk-through</li> </ul>	<ul style="list-style-type: none"> <li>Adhere to new health and safety guidelines that go beyond prior rules by stipulating: <ul style="list-style-type: none"> <li>Masks must be worn at all times</li> <li>Disinfecting and cleaning of equipment used with each change of user</li> </ul> </li> <li>Minimize concentration of humans in lab and maximize their separation whenever possible (average occupancy &lt;30% typical occupancy)</li> <li>Maintain record of space occupation to facilitate contact tracing should any occupants of space test positive for coronavirus or COVID-19</li> <li>Access to confined spaces (&lt;500 ft<sup>2</sup>), only via schedule for individual use</li> <li>Continue to perform work remotely when possible (Teamviewer, VPN, etc.)</li> <li>Common spaces previously used by students and PARADIM users to remain unoccupied, to minimize human interactions</li> </ul>
	<ul style="list-style-type: none"> <li><b>No on-site operations</b></li> <li>Cancellation of all non-essential activities</li> </ul>	<ul style="list-style-type: none"> <li><b>All sites: Characterization of mail-in samples will be supported</b>  work on <b>Sample-only requests</b>, sample growth by staff</li> </ul>
		<p><b>JHU (adhere to plan approved by campus administration):</b></p> <ul style="list-style-type: none"> <li>Local assistance by PARADIM Trainees for all users to work remotely</li> </ul>
		<p><b>CU-MBE (adhere to plan approved by campus administration):</b></p> <ul style="list-style-type: none"> <li>Staff Dr. Hanjong Paik and Dr. Brendan Faeth</li> <li>1<sup>st</sup> week for ramp-up and loading of MBE</li> <li>In-house and local users will work on strict schedule: Only fixed and pre-defined groups of users (cells) on dedicated days on the tools</li> <li>Local assistance by PARADIM staff for remote control of growth for experienced users (both local and external)</li> </ul>
	<p><b>Always open and accessible:</b></p> <ul style="list-style-type: none"> <li><b>CAU theory</b> (Dr. Betül Pamuk and Dr. Duminda Samarakoon)  The remote access user facility will continue to operate as it has all along and continue to support users.</li> <li><b>All sites</b>, including <b>CU-MBE</b>, <b>CU-TEM</b>, <b>JHU-Bulk</b> provide remote user support for data analysis, manuscript preparation, and project development and proposal writing. Online portal available for proposal submission: <a href="http://www.paradim.org">www.paradim.org</a>.</li> </ul>	
<b>Outreach</b>	<ul style="list-style-type: none"> <li><b>Virtual REU program</b> mentored by JHU (4 students) and Cornell (10 students)</li> <li><b>Virtual Summer School</b> on superconductivity conducted by JHU (June 15th to 19th, 2020)</li> <li>Cornell Summer School on Electron Microscopy <b>postponed to 2021</b></li> </ul>	

## PARADIM reactivation at Cornell – 6/4/2020

- 1) Director of PARADIM, Prof. Darrell Schlom
- 2) NSF-Materials Innovation Platform PARADIM
- 3) Use of instrumentation by sponsored research
- 4) The PARADIM Facilities serve >85 faculty from ~70 Universities and Departments across the nation.
- 5) The PARADIM Facilities at Cornell University are in Duffield Hall and within the shared facilities of the Cornell Center for Materials Research (CCMR). Individual reactivation plans for the Thin Film Facility and CCMR are in place.
- 6) Access and scheduling
  - a. Duffield Hall (MBE, XRD) on pre-defined schedule only, users organized in fixed cells.
  - b. CCMR access (TEM, PPMS) must be requested via this [Google Form](#) and granted through facility staff. Room occupancy will be controlled through booking system, see [CCMR guidance](#).
  - c. Start discussion and scheduling for external CCMR users via COVID declaration <https://www.ccmr.cornell.edu/wp-content/uploads/sites/2/2020/06/CCMR-COVID19-User-Agreement-1.pdf>.
- 7) No additional on-campus resources required.
- 8) PARADIM Staff working on site will be in charge of disinfection of work areas.
  - a. Disinfection with 60-90% alcohol spray or 2% bleach
  - b. Keyboards and mice of MBE, ARPES, MOCVD, and XRD computers
  - c. Armrests of lab and office chairs
  - d. Instrumentation surfaces and handles
  - e. Any cabinets/drawers/desiccators opened (before and after open)
  - f. Doorknobs of combined area (rooms 308 + 316 + 324 + 328 Duffield Hall)
  - g. Door handles
- 9) In addition to normally required protective **cloth or disposable masks must be worn at all times**.
- 10) Undergraduate researchers will **not be allowed** during early stages of research reactivation.
- 11) All users have taken required EH&S training, including [EHS 2019 - Return to Work Health and Safety Training for COVID-19](#).
- 12) As per University guidelines, anyone outside of the 50-mile radius from Cornell is required to quarantine for 14 days before coming to campus.
- 13) [Online submission](#) is available for Lab-Access and Sample-Only proposals for all PARADIM sites. All administrative support will continue to work remotely ([contact@paradim.org](mailto:contact@paradim.org)).

### Additional comments

- Small rooms <500 ft<sup>2</sup> are slated for single occupancy.
- Staff will perform Daily Health Checks prior to coming to campus.