

Planning Checklist for Core Restart

In preparation for Phase I research restart associated with COVID-19, JHU SOM Research Cores are required to provide a plan to resume core operations, which ensures social distancing and outlines steps to protect both staff and core customers. Completed core restart plans will be reviewed and approved by **Department Research Restart Committees**. Consistent with SOM-wide instructions, these plans should include a floor plan, which identifies specific bench or desk space of personnel and the instrument layout in the core. In addition, core restart plans should also include steps necessary for rapid shutdown if future conditions associated with COVID-19 require de-densification of research labs and cores.

Below is a checklist of considerations that may be helpful in the planning process. Based on the variety of core facility types (Service-Based, Instrument-Based and Hybrid Cores), considerations are provided for service-based cores and instrument-based cores. Please also reference the [University Research Restart Document](#), which provides specific institutional guidelines for the phased reopening of research laboratories. For questions related to core planning, please email: researchcores@jhmi.edu.

- **Density** of spaces and occupancy plans (>6 ft distances everywhere, currently >400 sf/person for bench-work).
 - Identify points of congestion, both inside the core and approaching the core for services (hallways, customer lines). Enumerate mitigation strategies and strategies for monitoring efficacy.
 - Consider signage and floor/wall decals for appropriate social distancing
 - Define hours of operation consistent with density goals.
 - Establish shift times for staff (if necessary)
 - Stagger different phases of workflow to minimize staff at any one given time
 - Define # of staff that needs to be on site during specified time period
 - Identify personnel that can work remotely
 - *Exemption for non-bench support staff:* For cores, some staff must be on-site to restock, track inventory, deliver products, or service instrumentation. Their on-site duties do not involve benchwork and they should be identified in personnel tables. If they have 'safe' office space, they can be exempt from the calculated density limitation (currently 400sf) for benchwork staff. However, safety may require additional mitigation and specialized PPE for them to perform their duties and should be included.
 - *Exemption for small rooms:* For many cores, shared equipment and resources are often in small rooms or spaces dedicated to that resource. If the space can be closed and isolated from users of other resources, it might qualify for exemption from the calculated density limitation (currently 400 sf). Additional considerations are approaching the small room and traffic in the area. Describe any mitigations needed to ensure safety.
 - *Instrumentation core:* For the goal of safe densities, which instruments can remain available for customer use? If densities must be exceeded (explain why), how will operator safety be ensured (PPE?)? Consider the approach-spaces to instrumentation, as well as distance between operators. Recommend using online calendars or schedulers.



- Will you re-locate equipment to ensure proper distancing?
- How will reservation policies maintain safe densities? Will there be limitations in available times of day or after-hours use?
 - Recommendations are only one person per instrument and gap times between reservations for cleaning & disinfecting.
- Can users opt to have staff operate equipment? Are there enough staff to eliminate on-site visits by users?
- If staff must assist users on-site at the instrument, how will you provide safety for everyone?
- Consider if users are a broad customer base vs small group of dedicated users. How will responsibilities of maintenance and safety (disinfection, social distancing) be delegated and monitored?
- *Hybrid core*: Consider the staff for services separately from staff supporting instrumentation. Calculations and justifications for densities and physical distancing are likely to be different.
- **Site Safety**:
 - Create a SOP for disinfecting work areas, office areas, instrumentation, etc.
 - Have adequate materials on hand for daily frequent cleanings
 - When possible, leave doors in cores open after cleaning
 - *Instrumentation core*: Clearly delineate staff responsibilities from user responsibilities. Consider how users to be educated of proper techniques, protecting equipment as well as health.
 - *Allowable disinfectants*: New instructions from HSE will likely include 70% alcohol solutions (ethanol or isopropanol) as an effective no-rinse disinfectant for coronaviruses. Alcohol solutions are not effective for some other pathogens, so this is not a general recommendation. Make sure to clean up spills prior to disinfecting with alcohol. Proteins can denature and salts precipitate, complicating usability or interfering with ability to disinfect.
- **Workflow**: Shift work and customer interactions online to minimize density risks
 - Plan to communicate via email, Zoom, electronic submission forms (iLab), deliver data via OneDrive or NAS
 - *Service core*: Minimizing density risks, establish sample submission times and procedures. Establish procedures for reporting service status or delivering results. Consider electronic scheduling. Post guidelines and publicize procedures.
 - Whenever possible, establish contactless exchange of specimens and/or products
 - For transaction tracking, avoid sharing of pens, paper, tablets, or stylus. Minimize physical contact.
 - Do not share electronic devices (e.g. tablet) for orders or instrument scheduling
 - *Instrumentation core*:
 - Consistent with SOPs defined above, develop instructions/signage to communicate to users the policies for safe operation, protecting their health and health of others
 - Example signage can be found [here](#).
 - Develop a written plan outlining what equipment / area requires disinfection, including materials used for protection and time in between usage.



- Utilize “In Use” signage and permit only one user in instrument area at a time
- Consider screen-sharing software (Teams, TeamViewer) for remote troubleshooting.
- Provide training materials for any new communications software introduced.
- **Procurement & Timing:**
 - Identify materials required for site mitigation and protection. Identify vendors and anticipate procurement delays.
 - Possibilities: Sneeze-shields for customer interactions. Webcam doorbells.
 - Plans for monitoring PPE supplies and plans to maintain adequate inventory for staff
 - Identify all consumables for phased restart and anticipate delays
 - Clarify responsibilities of staff for ordering & monitoring of consumables. Consider both consumables for services and consumables for COVID safety (PPE, disinfectants, etc)
 - Replenish stocks of materials, anticipating increases due to pent-up demand. Anticipate procurement delays. Make sure before opening that you have enough materials, reagents, etc.
 - Restoring operability of instrumentation prior to opening
 - Schedule any repairs or preventive maintenance *now*. By communicating with guards in advance, Essential Personnel can give access to repair personnel. After restarting cores, there will surely be scheduling delays for repairs.

Additional Resources

Detailed Considerations for Core Ramp-Up from Association of Biomolecular Resource Facilities (ABRF)
https://abrf.org/sites/default/files/temp/abrf_core_facility_ramp-up_information_v3.1.pdf