

Ramp-up Your Scientific Research With ‘The Research Lab Toolkit’

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The COVID-19 pandemic has caused an unforeseen upheaval in the scientific ecosystem. Consequently, the traditional systems of scientific publications and working protocols in the research lab, have witnessed a substantial change. Gradually, the world is attempting to flex its muscles and resume research activities. However, with physical distancing in effect, there are rising concerns among researchers regarding staying competitive and maintaining research productivity. This has created an urgent need to rethink every aspect of research and lab management.

Are you a researcher working in a lab during the pandemic? [Enago invites you to participate in a global survey](#) on the re-opening and functioning of research laboratories in this pandemic-ridden world. The survey ends on February 28, 2021.

How about having a handy research lab toolkit exclusively prepared by experts! A collection of checklists for researchers with a zeal to reopen labs and revive research after the unprecedented break! This toolkit will help you proactively plan for a smooth transition to the labs. The checklists will assist in drafting appropriate research plans and adopt strategies to mitigate the COVID-19 pandemic.

Is Your Lab Equipped To Allow Working During a Pandemic?

Researchers and academics are keen to return to their labs! Several research labs are considering phased reopening with staggered work schedules. While doing so, it is paramount that the working spaces are well equipped and sufficiently comply with the safety guidelines.

It is imperative to identify which experiments and lab systems are most critical and must be given high priority. Supervisors and senior lab members must carefully evaluate what activities can be efficiently performed from home. Abiding by the social distancing norms, this would enable efficient utilization of space by other members who ought to work in the lab. Furthermore, principal investigators must decide work schedules keeping in mind the stress/anxiety that may come while returning to the lab after a long time! In these uncertain times, it is also important to plan activities judiciously to prevent delays due to reduced staff. Moreover, lab managers may also consider reassignment of duties and cross-training lab members so that they can step in for support if required. Additionally,

The lockdown and travel restrictions [substantially affected the supply chain system](#). It is therefore sensible to plan for reagents, consumables (disinfectants, personal protective equipment), and other labware that have limited availability.

A researcher must be mindful of the fact that all the reopening protocols should be reversible, in case an unforeseen emergency causes curtailing of lab functions again.

This [checklist](#) drafted by our experts covers major key points that shall guide lab managers in readying research workspaces and precociously prepare for an emergency.

Exclusive Precautions for Researchers Working Amidst The Pandemic

The coronavirus is highly infectious and in these testing times, research lab safety and protection for workers is a top priority. Every lab member must exercise extra precautions to minimize the risk of spreading the infection and preventing surface contamination. Before entering the lab, researchers must carry out an appropriate COVID-19 risk self-assessment to ensure the personal safety and security of co-workers.

Research lab managers must have a proper schedule for using shared equipment spaces (tissue culture rooms, fermentation rooms, microscopy rooms) and their routine disinfection. It is important to use appropriate personal protective equipment (PPE) whenever required depending on the nature of research. Additionally, one must thoroughly clean the research equipment both before and after using them, especially the high-touch surfaces. Implement a [buddy safety system](#) such that every researcher working in research facilities has a buddy (work colleague) they can check in with at the beginning and end of each day. This will encourage researchers to have an open dialogue regarding concerns they may be facing while working during the pandemic.

[Take a look at this checklist](#) that lists all the key precautions researchers must follow prior to research resumption.

Research-based Tips While Working During The Pandemic

Researchers are not just scrambling to protect themselves but also their experimental work involving human participants and animal subjects. There are still looming concerns about starting animal and microorganism based research that ideally lasts from few weeks to several months or years. Investigators are worried about research being interrupted or delayed again by an emergency shut down.

As research professionals, we have to be diligent and methodical. It is time to reassess the lab's safety policies and update protocols to tactfully deal with the novel coronavirus. Furthermore, the lab in charge has to ensure that prior to the beginning of an experiment, critical supplies (those having short shelf lives or need to be procured from overseas) are available. It is equally important to ensure that the planned research complies with all the requirements as applicable. This includes approvals from committees such as the Institutional Review Board (IRB) and Institutional Animal Care and Use Committee (IACUC). Our experts have drafted a preparation checklist that outlines actions to consider for creating effective research continuity plans.

[Download the checklist](#) and make sure you conduct your research hassle-free.

How to Stay Productive While Working Remotely

Extensive efforts are being taken to resume normal working conditions. Yet, a significant section of the scientific workforce is still working remotely. Consequently, this has resulted in unanticipated delays in data collection and fieldwork. Furthermore, there are rising concerns related to project timelines and future job prospects. [How to overcome these hurdles?](#) Researchers can utilize this time to complete unfinished manuscripts, and network with experts. Furthermore, they can promote research on social media platforms, and attend online webinars.

To help you get the most of remote working, [we present a checklist](#), carefully curated by our experts. This will assist you to stay productive, regardless of your work location.

We hope that you will make the best use of these checklists and ensure the successful resumption of research activity. Do let us know your thoughts while you read through them!

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