

Guidance to MIT DLCs and PIs related to lab-specific ramp-up planning

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Prepared by the MIT Research Ramp-Up Lightning Committee (Marc Baldo, Vladimir Bulovic, James DiCarlo, Tolga Durak, Elazer Edelman, Sarah Farrington, Peter Fisher, James Fox, Leny Gocheva, Ronald Hasseltine, Tyler Jacks, Timothy Jamison, Jacqueline Lees, Aude Oliva, Nicholas Roy, Daniela Rus, and Dennis Whyte)

Key input was received from MIT Vice President for Research Maria Zuber; MIT Associate Provost Krystyn Van Vliet and the MIT Space Contingency Working Group; MIT Medical Director Cecilia Stuopis; the MIT Research Continuity Working Group; the MIT Medical Outreach Office; and the Legal, Ethics, and Equity Committee of the MIT Campus and Community Health Management System.

Introduction and Overview

As part of the preparation for increasing research activity on campus in the era of COVID-19, MIT Vice President for Research Maria Zuber constituted the MIT Research Ramp-Up Lightning Committee, which was charged with developing general guidelines that would govern the ramp-up process. After time for widespread review and revision, the final report from the committee was submitted. View the document [“MIT Research Ramp-Up Committee Report”](#)

Working with several senior leaders and staff at MIT, the committee has shifted its attention to the implementation phase of this process. It is developing documents that summarize the principles as well as the operating protocols and approaches that will guide the ramping up of research on our campus, with the safety and security of our personnel being the most important guiding principle. Returning to campus under these conditions will be a learning experience, and we want to be able to start gradually so that we give ourselves the best chance to get it right and not have a setback. We want to learn to walk together well before we pick up the pace.

As shown in Figure 1, the first phase of the research ramp-up (RR) will allow PIs to have an on-campus research activity up to 25% of their full research capacity. During the research ramp-up, MIT is maintaining the policy that all work that can be done remotely, must be done remotely. After a period of time and with the successful implementation of the RR Phase 1, PIs will be given the opportunity to increase their on-campus research activity to up to 50% of full capacity (Phase 2). As described in detail below, the determination of “full research capacity” will be done through a process of calculating the weekly aggregate work hours for the PI’s research personnel.

The goal of RR Phase 1 will be to increase research levels at MIT in work conditions appropriate for the COVID-19 era while ensuring that MIT central services, core facilities and other shared resources are not over-burdened. We are asking PIs to plan conservatively to assist in this effort.

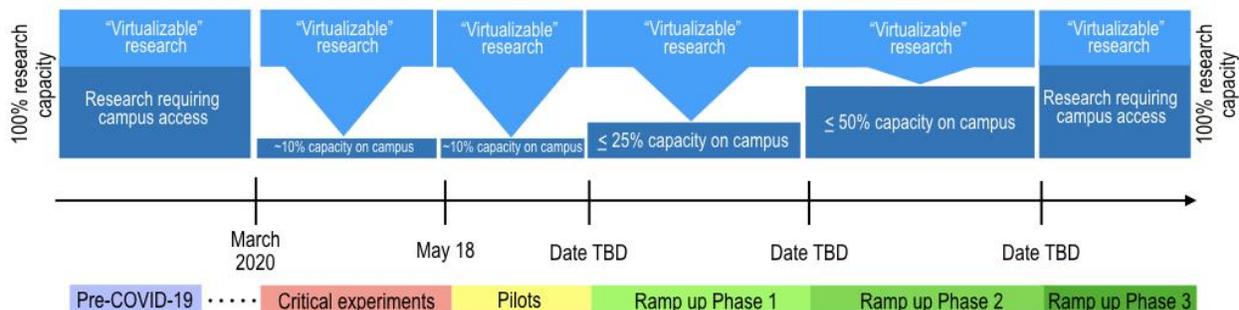


Figure 1: Plan for ramping up on-campus research at MIT. MIT will undertake a phased approach to ramping up research on campus. In the pre-COVID-19 era, a PI’s research effort could be described as that requiring on-campus access and that which could be done remotely (“virtualizable” research). In response to the COVID-19 pandemic, MIT significantly scaled back on campus activity, limiting campus research to a small number of experiments deemed critical. This resulted in approximately a 90% reduction in the research capacity and population on-campus, affecting different PIs’ labs differently and prioritizing only critical on-campus research activities approved by the VPR and Provost. As of May 18, MIT began to pilot new procedures to ready the campus for a return to research. During this pilot phase the number of individuals approved to access campus did not increase. During RR Phase 1, which will start at a date to be determined and informed by changes in government guidance and requirements for public health, PIs requesting access to campus for themselves and/or members of their groups will be allowed a maximum of 25% of their full capacity (defined later in this document) on campus. During Research Ramp-Up Phase 2, PIs will be allowed to have a maximum of 50% of their full capacity on campus. At the completion of the research ramp-up (Phase 3), PIs will be allowed to bring their research to full capacity on campus. Importantly, in all phases PIs must structure their research activities and research space layouts to comply with MIT policies and guidelines.

MIT policies related to space utilization and workplace conditions for the research ramp-up have been formed in response to guidelines published by the United States Centers for Disease Control and Prevention (CDC) (<https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>), the United States Department of Labor Occupational Health and Safety Association (OSHA) (<https://www.osha.gov/Publications/OSHA3990.pdf>), and the Commonwealth of Massachusetts (<https://www.mass.gov/info-details/reopening-massachusetts>).

This document is being sent to DLC heads with the expectation that they will send it along to the faculty members and other principal investigators in their units (collectively, “PIs”). It contains information about how to develop PI-specific plans for the research ramp-up at MIT.

With the assistance of the DLCs, this process involves **two planning steps** for the PI (Figure 2). The first is to determine how their physical space will be managed and occupied to allow for proper density and spacing of individuals according to CDC guidelines and MIT policies. We refer to this process as **Research Ramp-Up (RR) Planning Exercise A**. Beyond the consideration of space utilization, PIs will also be asked to manage the specific personnel that will utilize the research space that they oversee, which will allow us to carry out the research ramp-up in a phased fashion. We refer to this process as **RR Planning Exercise B**.

It is important to note that not all of personnel will be able to or will choose to return to campus during the research ramp-up. **The return to campus is fully voluntary, and personnel cannot feel pressured to return.** Returning personnel will have to agree to taking an initial SARS-CoV-2 viral test upon re-entry to campus and undergo subsequent testing and health monitoring of symptoms related to COVID-19 as deemed necessary by MIT Medical. Returning personnel must affirm that they understand and agree to these and other conditions by filling out an electronic “Acknowledgment Form.” The content of this form is included in [Appendix 3](#) of this document.



Figure 2. Overview of Research Ramp-Up (RR) Planning Exercises A and B. PIs wishing to ramp up on-campus research will undertake two planning exercises that are focused on space (Exercise A) and personnel (Exercise B). Details related to the steps shown are covered in the sections below describing each Planning Exercise.

Note that this document is specific to the initial steps that PIs and DLCs will take for this purpose; additional guidance to DLCs, PIs, and staff about the ramp-up process will follow.

Also note this process is only necessary for PIs for whom access to campus (for themselves or members of their groups) is required during RR Phase 1. PIs who wish to authorize access in the future will be able to submit this information then.

DLC heads, administrative officers (AOs), and PIs should familiarize themselves with all parts of this document.

Instructions to DLCs for Research Ramp-Up Exercises A and B

- **Create a list of all the PIs for which you have oversight.** You should primarily be thinking about the spaces that you (DLC) manage and oversee and the set of PIs that manage the individual rooms in those spaces. Please keep in mind that not all research PIs are faculty. You should already have this list from your ramp-down activities. Your EHS officer should be particularly helpful in this regard as s/he is aware of all the spaces in your DLC and has safety oversight thereof.
- **Deliver floor plans to each PI as soon as possible.** Where possible, these floor plans should indicate sinks, benches, hoods, or other fixed structures or large pieces of equipment. These plans should include room numbers and approximate square footage of each room. For rooms shared between multiple PIs, encourage the PIs to coordinate among themselves regarding appropriate space utilization and scheduling. If you do not have detailed floor plans for your DLC, you can obtain overview floor plans here: <https://web.mit.edu/facilities/maps/index.html>
- **Deliver instructions on *RR Planning Exercises* to each PI (provided below).** As an overview, each PI desiring ramp-up must complete two RR Planning Exercises. These are referred to as *RR Planning Exercise A* (space plans) and *RR Planning Exercise B* (personnel plans):

We encourage you to set a deadline for returning the product of *RR Planning Exercise A* to you by May 26. Where necessary, you should provide feedback to your PIs to bring their plans into compliance. These “space plans” will be kept by the DLCs and will need to be made available upon request. DLCs will be responsible for monitoring compliance with PI space plans.

To address “occupancy,” PIs will carry out *RR Planning Exercise B*. **PIs should complete *RR Planning Exercise B* preferably by June 1.** DLCs will be responsible for compliance with the “personnel plans” as well.

- **You will have critical first-level oversight on the products of your PI planning exercises.** We will provide you with instructions on issues to be aware of and guidance for questions that you may be asked by PIs. Following this oversight, some PI RR plans may need to be adjusted, and your thoughtfulness and leadership are needed to maintain safe guardrails with respect to density and occupancy guidelines as well as the usage of core facilities, animal facilities and other central services that could become quickly over-burdened if research ramps up too quickly.
- **Please emphasize that no PI will be able to ramp up their research without completing their RR plans AND having those plans approved by their DLC.**
- **Core facilities within your DLC will also be asked to submit a core plan. Those plans will follow guidelines that differ from those outlined here.**

Instructions to PIs for Research Ramp-Up (RR) Exercise A

PI RR Planning Exercise A: Space layout designed for safety during research ramp-up

We are empowering you to design how to ramp up the research that you lead. However, this opportunity comes with significant responsibility. In particular, if you choose to ramp up, you will be responsible for making sure that your personnel understand and adhere to all safety guidelines in all of the space under your responsibility (i.e., assigned by your DLC for your research group's use and, if a laboratory space, assigned to your oversight for EHS compliance). To accomplish a safe research ramp-up, you will need to understand the new COVID-19-driven safety guidelines for operations within the MIT space that you oversee, and you will need to establish protocols that bring your spaces in line with that guidance. These guidelines are in addition to all of the safety guidelines that you normally follow and supervise, which must, of course, remain in full effect. In addition, you will continue to be the main point of contact for information, guidance, and reassurance for each of the researchers that you oversee -- graduate students, postdocs, technicians. They will each be looking to you for help on many questions, and MIT and your DLC will be looking to you for your leadership, understanding, and compassion. You cannot require any personnel to return to campus who feel that doing so would be unsafe or untenable for them.

Purpose of this exercise

This exercise is not about the specific individuals that may or may not be able to return to the MIT campus for research activities. Instead, **your RR Planning Exercise A is first and foremost about examining each and every room that you oversee and establishing COVID-19-era protocols for the use of those rooms.** Each room is your responsibility, and failure to plan or a poorly executed plan would put the safety of your personnel at risk and could result in the shutdown of research for your lab, floor, DLC, or even all of MIT.

Things to know before you get started:

- **Floor plans:** Your DLC will provide you with floor plans and the square footage of each room assigned to you.
- **Room capacity limits:** Each and every one of your controlled spaces will need to adhere to a maximum personal density AND spacing in static working situations at all times (see below). Plans should be made for static work situations in which each individual occupies a relatively fixed location for more than 10 minutes at a time. Transient interactions that occur with less than 6 feet (ft) of separation between individuals are acceptable, but they should be very occasional and as brief as possible.

Key Steps

1. Using the floor plans provided by your DLC, **determine the maximum possible static occupancy for each of your assigned rooms**. To do this, start by taking the square footage (sf) of each room and dividing by 160 and rounding down. For rooms smaller than 320 sf, the maximum occupancy is 1 person.
2. Now, examine the layout of each room, including benches, hoods and other large equipment, and determine if and how you can place people so that **all pairs are at least 6 ft apart (more is preferable)** while carrying out their primary research activities. *If the layout of a room does not allow personnel to maintain this distancing, then the actual max occupancy of a room will be lower than calculated above.* Mark those locations on the floor plan and indicate the final maximum occupancy next to the room number.

Room size (sf)	100	200	300	400	500	700	1000
Max possible occupancy	1	1	1	2	3	4	6
Actual max occupancy	1	1	1	≤2	≤3	≤4	≤6

Note that these are maximum room occupancies. You may choose to have fewer people with greater spacing if you choose. We expect that many PIs will choose such options, especially in Phase 1 of the ramp-up.

3. As discussed below, your ramp-up plan may include shifts of different personnel over the course of a day. If so, you should consider rotating the positions of people between shifts.
4. Plan for and note any expected occasional room use (non-static occupancy). For example, some rooms may be used by two people without fixed stations. In those cases, they should remain at least 6 feet apart except for periods of less than 10 minutes when absolutely necessary. Consider relocating shared equipment to common spaces whenever possible to minimize the number of people requiring access to your lab space.
5. For rooms that are not expected to be used at all in the RR Phase 1, designate those as unused.
6. If you share a room with another PI (e.g., a tissue culture room or common equipment room), you need to coordinate with the other lab so that the actual maximum occupancy in the space is never exceeded.
7. After considering steps 1-6 above, use any electronic editor (e.g., Adobe Acrobat, PowerPoint, Preview) to make an electronic markup of your floor plan similar to the examples in Figure 3. Use dots to indicate positions of individuals as shown below. Note plans that do not conform to guidelines are shown in Figure 4.
8. In the [RR Planning Exercise A Checklist](#) (also shown in Appendix 1), write a short (<1 page) narrative of how you plan to manage your space to follow the guidelines above. Focus that narrative particularly on non-standard rooms or situations that you foresee in terms of maintaining density and/or distance guidelines and your plan to manage those conditions.

9. Designate one member of your lab to be your COVID-19 Designated Monitor. In addition to yourself, your COVID-19 Designated Monitor will help in the development, execution, and oversight of these plans. This individual should double-check your calculations and provide input on how the plan will impact research in the lab. Provide the name and MIT email address of this person on the RR Planning Exercise A Checklist (see Appendix 1).
10. Complete the EHS “Laboratory checklist for ramp-up inspection” checklists (see [Appendix 6](#)).
11. Complete the [RR Planning Exercise A Checklist](#) (see [Appendix 1](#)) to ensure that you have done all of the necessary steps of this exercise.
12. **Submit your marked-up floor plans and completed RR Planning Exercise A Checklist to the AO of the DLC as soon as possible, but no later than May 26.** If you belong to multiple DLCs, send the materials to the AO of the DLC where your space is located. Your AO and DLC head may have questions or requested adjustments to your plans, and they will need time to review them.

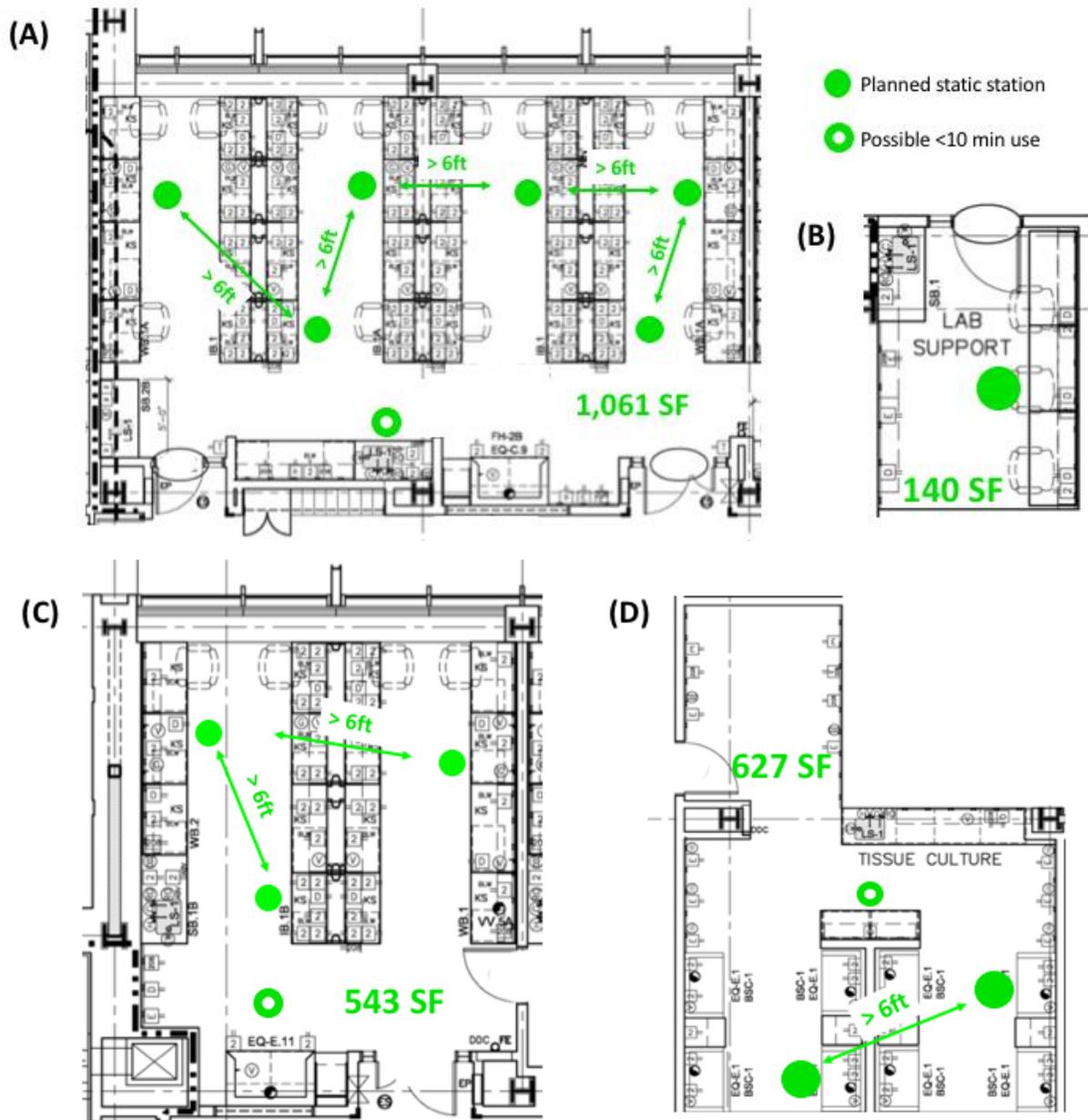


Figure 3. Examples of space plans that meet the criteria for safe space layout. (A) A 1,061 sf lab space can accommodate a maximum of 6 people working at static stations (solid circles); **however, PIs may choose a lower number of researchers for increased distancing between workers.** Transient interactions (less than 10 minutes) that occur with less than 6 feet of separation between individuals are acceptable, but they should be very occasional and as brief as possible (e.g., returning a reagent to a refrigerator, handwashing at a sink, etc.) **(B)** Example of a 140 sf office space that can accommodate a maximum of 1 person. Please note that such spaces should be used only when waiting for experiments, and should not be occupied by individuals solely for activities that can be performed remotely. **(C)** Example of a 543 sf laboratory space that can accommodate a maximum of 3 people working at static stations. **(D)** Example of a 627 sf tissue culture room. Although the 160 sf/ person rule would allow a maximum occupancy of 3, in this case, the lab layout does not allow for that many researchers. Instead, the actual maximum occupancy is 2.

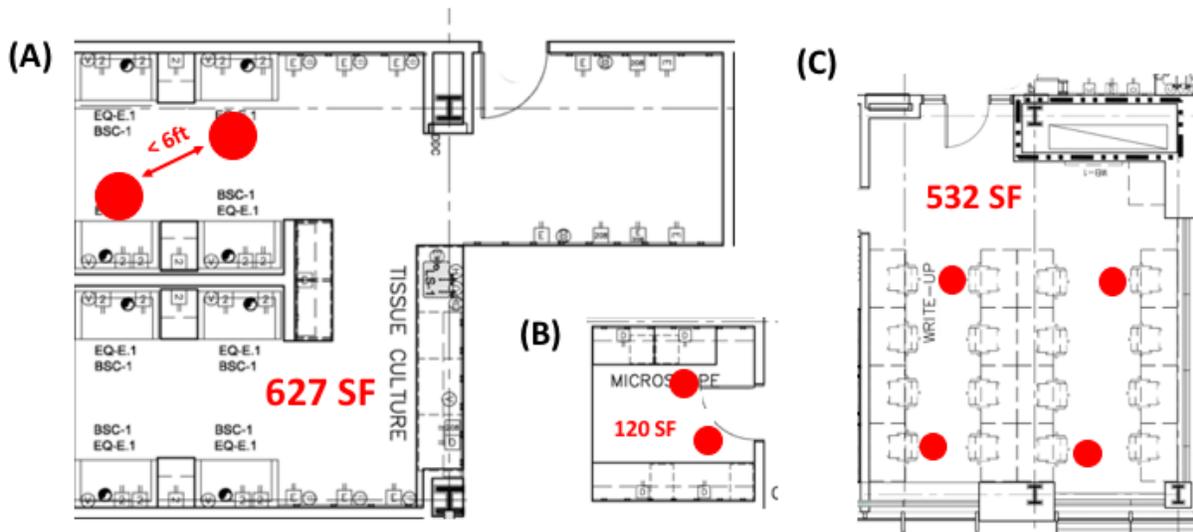


Figure 4. Examples of space plans that DO NOT meet the criteria for safe lab layout. (A) A 627 sf tissue culture room can accommodate a maximum of 3 people working at static stations (solid circles); however, there needs to be 6 feet of physical distance between workers. **(B)** A 120 sf microscope room can only accommodate 1 person under the guidelines. **(C)** Even though this plan has 6 feet of physical distance between people, a 532 sf room can accommodate a maximum of 3 people.

Instructions to PIs for Research Ramp-Up (RR) Exercise B

PI RR Planning Exercise B: Developing your group's plan for on-campus research

As shown in Figure 1, MIT is implementing a three-step, phase-in process to accomplish the goal of ramping up research on campus with the safety and security of our research personnel as our first priority. The start date of Phase 1 has not been determined at this time and will depend in part on guidance from the State of Massachusetts and the City of Cambridge. However, we are asking you to begin planning now. During RR Phase 1, each PI will be capped at 25% of their "full capacity," which will be calculated as described below. Note that this is not 25% of personnel but rather a percentage of hours compared to an aggregate number of hours in a typical workweek for your group (see below). Following successful completion of Phase 1, RR Phase 2 will allow PIs to have up to 50% of full capacity on campus. No specific time is set for the transition to Phase 2, but Phase 1 is expected to last at least several weeks. The final phase of the research ramp-up (Phase 3) will not be capped by a measure of research activity, but, depending on COVID-19 conditions, could still be affected by limitations on the use of research spaces as mandated by MIT guidelines and policies.

Important considerations

Some research personnel do not need to return to campus at this time, because all of their work can be done remotely. **During the research ramp-up, MIT is maintaining the policy that all work that can be done remotely, must be done remotely.** Also, even for those individuals who need to return to campus to carry out their work, other tasks should be done remotely whenever possible. Researchers should be in on campus for the minimal time necessary for work that requires access to campus facilities or equipment. All meetings, including group meetings and larger gatherings, should continue to be held remotely. As the ramp-up proceeds, and public health conditions change, the definition of what can be done on campus may change.

It is important to note that not all of your personnel will be able to or will choose to return to campus at this time. **The return to campus is fully voluntary, and personnel cannot feel pressured to return.** Among many other considerations, they will need to understand your laboratory space plan (the product of *RR Planning Exercise A*) and work schedules. Your lab protocol and expectations should be discussed with all members of the group so that they may make an informed decision as to whether to return to campus at this time. It is recommended that you seek their input in the planning process.

All returning personnel will need to agree to provide a daily attestation of their health status related to COVID-19 symptoms and to comply with procedures required by MIT Medical if they report symptoms. In addition to conducting viral testing on all personnel before they can be cleared to return to campus, MIT intends to carry out other health monitoring procedures, which may include temperature recording, additional SARS-CoV-2 virus testing, and serology screening on returning personnel.

These personnel will have to affirm that they understand and agree to these conditions by filling out an electronic "Acknowledgment Form." The content of this form is included in [Appendix 3](#) of this document. You should share this with your personnel as they are deciding about their availability to return to campus, but they will only be able to sign the form in an online system. The details on the use of the online acknowledgement system will be the subject of a future

communication. You will be notified of those personnel who are available to return to campus, which will be important in your planning. Individuals can change their status at any time, and you will be able to adjust your RR plans accordingly.

The Legal, Ethics, and Equity (LEE) Committee of the MIT Campus and Community Health Monitoring System has developed guidance for discussing return-to-campus plans with members of your research group. These can be found in [Appendix 4](#) of this document, and you are strongly encouraged to review them prior to discussing return-to-campus plans. We note that free parking for the MIT community in MIT lots and garages has been extended until September 1. We are working on creating building cleaning protocols and will be providing those as soon as they are available.

All returning personnel will need to complete an online EHS training course, which includes content related to how to conduct research in the COVID-19 era. While on campus, all personnel will be required to wear face coverings/ masks except where doing so may introduce a safety hazard to staff or where an individual is unable to wear a face covering due to a medical condition or disability. Details about these procedures will be sent separately.

Note: During the research ramp-up access to campus buildings will occur through designated access points. Personnel will be allowed to enter buildings only if they have: 1) been designated by their PIs and approved by their DLC as needing to be on campus to carry out their research; 2) signed the Acknowledgement Form online; 3) have undergone viral testing by MIT Medical; 4) completed the online EHS training course, and 5) completed a daily health questionnaire.

Key Steps in Completing RR Planning Exercise B

Each of the seven key steps below for Planning Exercise B will be facilitated by the [RR Planning Exercise B Checklist](#) ([Appendix 2](#)) and a simple research ramp-up planning spreadsheet (see example in [Appendix 5](#)). This spreadsheet will be distributed to DLCs and PIs soon. Once you (the PI) complete this spreadsheet, you will submit it to your DLC head or AO. Following review and approval, DLCs will upload information from PI spreadsheets into a central database that has been developed by MIT Information Systems & Technology (IS&T) to support the research ramp-up effort.

1) Determine your “100% capacity” in order to calculate RR Phase 1 and 2 capacity levels

You will begin generating a full list of individuals in your research groups (including yourself, but excluding undergraduate researchers, visiting students, and administrative staff). **It is critical that you have the Kerberos name of each individual and that you properly enter it in the spreadsheet.** DLCs will review these lists to ensure that they comply with the definition of permissible personnel. If a research group member is shared between two or more PIs, only one PI should list them; the PIs should discuss these cases and make final determinations. Based on the approved personnel list, a simple calculation will be performed in the spreadsheet to determine your “100% capacity” in terms of aggregate person hours per week per PI group. We have assigned 50 hours per week per approved personnel for this exercise. Dividing aggregate person hours per week by two gives the PI their 50% capacity in hours per week (relevant to RR Phase 2), and dividing it by four gives them their 25% capacity, which is what will be used for RR Phase 1 planning. These hours per week can then be distributed amongst your returning personnel.

# of permissible personnel*	100% capacity (RR Phase 3)	50% capacity (RR Phase 2)	25% capacity (RR Phase 1)
10 people	500 hours/ week	250 hours/ week	125 hours/ week
5 people	250 hours/ week	125 hours/ week	62 hours/ week

*number excludes undergraduate researchers, visiting students, and administrative staff

We stress that your Phase 1 (25%) capacity represents a sort of “speed limit” on the total number of person hours per week. This capacity is your **maximum** on-campus capacity during RR Phase 1, and your goal should be to stay as far below this speed limit as possible so that we can successfully move to Phase 2 and beyond. It is not necessary or encouraged to use all possible hours available through this approach; this simply sets a maximum so that we can each individually manage key on-campus needs for our groups and also collectively manage the lower density of persons on campus, in buildings, and on floors as we ramp up.

The list of “permissible personnel” individuals associated with your research group will form the rows of your spreadsheet, and all such individuals, including yourself, should be listed on the spreadsheet regardless if their work requires them to return to campus in RR Phase 1 (see example in [Appendix 5](#)). It is recommended that you list all such permissible personnel, because, in aggregate, they define your “100% capacity” as described above.

2) Distribute hours amongst your returning personnel

The spreadsheet will allow you to indicate, for each of your research personnel, as to whether they need access to campus at this time (or instead are “fully virtualizable”) and whether they are available to return to campus. You will then distribute your maximum weekly hours amongst those personnel (including yourself) who need and are available for campus access. These maximum weekly hours should include the sum of **all** weekly hours that each person needs to be on campus, whether that time is spent in your research space or in one or more core facilities (see step 5, below). Again, recall that this is a maximum allotment of hours. You are encouraged to keep the total assigned hours as small as possible. As situations change and the needs and availability of your personnel change, this information can be updated to allow additional individuals access and to remove others from the access list. **In the [RR Planning Exercise B Checklist](#) (see [Appendix 2](#)), you will need to provide a short justification for why each of those individuals are returning to campus.**

Name	This person is available to return to campus in RR1	This person needs to be on campus in RR1	PI assigned hours/ week
Jane Smith (PI)	True	True	15
Mary Smith	False	False	0
Tom Smith	True	False	0
Julie Doe	True	True	24
Greg Smith	True	True	20
Total PI assigned hours per week:			59
Max person hours per week in RR1:			62

3) Estimate work schedules

You will be asked to use the RR Planning Exercise B Spreadsheet to assign **rough** initial weekly schedules to each of your returning personnel, recognizing that this may change from time to time, and recognizing that some research requires uncertain end times and even uncertain days. For some PIs, their lab or other research spaces will be sufficient to allow all of their on-campus researchers to work together at the same time. For others, it will be necessary to develop shift-work schedules to accommodate the space constraints that you developed in *RR Planning Exercise A*. These shifts might be fixed (AM/PM, alternate day, or some combination) or variable. **In the end, you may have to develop weekly work schedules (which can be adjusted week to week) to ensure that your group is complying each week with both the space and personnel elements of this planning exercise.** We note that if an individual on a given shift contracts COVID-19 or tests positive for SARS-CoV-2, others working with them in that space over a period of days will likely need to be isolated for some time. Therefore, limiting the number of individuals who work together on shifts and avoiding mixing of people in different shifts has clear advantages. DLC heads will collect and review your planning exercises, but you are ultimately responsible for following your plan and for the conveying importance of doing so to each individual in your research group. Your group's designated COVID-19 Designated Monitor will also be responsible for monitoring compliance with weekly work schedules and space utilization.

During RR Phase 1, MIT plans to make buildings accessible 24 hours a day and 7 days a week. MIT Police, EHS and repair and maintenance services are always available 24/7 for emergency support. Custodial cleaning will be expanded to include Saturdays. However, at present, in order to ease the enhanced burden on custodial services, the cleaning schedule for Sundays is expected to be very limited. You should consider these factors when developing your weekly schedules.

Given the expectation of research occurring at lower occupancy levels, PIs should be aware of and communicate to their lab personnel the MIT EHS "Working Alone Policy" (<https://ehs.mit.edu/about/policies/working-alone-policy/>). Working alone with hazardous materials or equipment or otherwise working under conditions that may create the risk of serious injury should be avoided. However, working alone may be allowed with permission from the PI, if a determination is made that the risk is controllable under established specific conditions. DLC-EHS Staff and EHS Office will assist in the implementation of the policy.

4) Assign building access information

In an effort to control the possible spread of SARS-CoV-2 to our community, limiting circulation of individuals on campus is an important consideration. Using the Research Ramp-Up Spreadsheet, you will list the MIT buildings that your returning personnel will plan to carry out work during RR Phase 1. You should limit this as much as possible. You should not list additional buildings housing core facilities that will be used by your personnel, as those will be handled separately (see below). You also should not list buildings that a person may need to travel through to get to their work building as pathway access will be provided to the researcher's designated building. **In short, most researchers should have only one access building listed.** But, for labs or projects spread over multiple buildings, some researchers will work in multiple buildings and all of those buildings should be listed in that case.

Because access to MIT buildings during RR Phase 1 will be limited, to those buildings for which an individual has approved access (including the requested core facilities, see below), and,

thus, entering this information correctly and completely is quite important to avoid future frustration. Recall that access to buildings will be monitored through the use of a limited number of physical access points on campus.

5) Assign anticipated core facility needs

Many of the normal core facilities, shared resources, other central services as well as animal facilities will be made available to facilitate research activities across campus. However, it is essential that they can function safely and within the policies regarding safe workplace practices and, in some cases, with reduced staffing. Therefore, for planning purposes your research plans must include a prioritized list core facilities that your personnel wish to use, and the spreadsheet tool will provide you drop down lists of cores for you to select for each individual.

You (the PI) must use the Research Ramp-Up Spreadsheet, which will be provided to you, to fill out a prioritized list of expected core facility usage (or other MIT research facilities that may not be designated formally as a core facility) in RR Phase 1. These entries will serve two purposes. First, it will be used to ensure that your personnel have access to the buildings in which the core facilities are located (see step 4, above). Second, it will allow each core facility to gauge the demand and to directly reach out to individual researchers as needed.

Core leaders and administrators will use your indications of possible need to guide their assessment of aggregate demand and capacity. Some adjustment of PI plans may be required to balance demand and capacity. As we begin this ramp-up process, we urge PIs to be conservative in their planning related to core facilities and shared services, so that plans do not have to be adjusted to address any aggregate-level concerns. This is a shared responsibility, and we need your cooperation.

In planning the weekly hours of your personnel on campus (step 2), you should include time spent in core facilities, animal facilities, and other shared facilities.

6) Include comment about transportation to campus

Using the Research Ramp-Up Spreadsheet, you will also enter the expected mode of transportation to and from campus for each of your returning personnel. This will allow you to engage with them on this subject, which we know is of concern to many. If a person expects to use multiple modalities to get to and from campus, please list the one that puts them in contact with the biggest number of people. Further information regarding parking on campus will be provided as soon as possible. Note that free parking for the MIT community in MIT lots and garages has been extended until September 1.

7) Unusual circumstances

Because we cannot foresee all possible PI ramp-up circumstances, the spreadsheet provides a field for you to flag and add a short text field if you were unable to enter some important information regarding your personnel or their access needed.

Submit your completed RR Planning Exercise B Checklist (which includes a short personnel justification) and Research Ramp-Up Spreadsheet to the AO of your DLC, preferably by June 1. Your AO and DLC head may have questions or request adjustments to your plans, and they will need time to review them.

Plan so that you are agile as possible

Given the possibility that research might have to be scaled-back again with little notice, PIs are strongly advised to ramp up projects that can be ramped down quickly and at relatively little cost and complexity. As such, care should be taken in choosing projects to ramp up in the early phases.

APPENDIX 1: RR Planning Exercise A Checklist

___ Reviewed the floor plans sent by my DLC head/ AO and determined the maximum occupancy of each room based on the 160 sf/ person requirement.

___ Reviewed the configuration of my laboratory space in terms of benches, hoods, and large pieces of equipment and determined if and how I can place people so that all personnel are at least 6 ft apart while carrying out their primary research activities.

___ Considered relocating shared instruments to common spaces to minimize the number of people in my spaces and increase personnel separation.

___ If I share a space with another PI (e.g., tissue culture room), I have coordinated with the other PI so that actual maximum occupancy in the space is never exceeded.

___ Used an electronic editor to make an electronic markup of my floor plan (similar to the images in Figure 3) and indicated the final maximum occupancy next to the room number.

___ Marked any rooms that are not expected to be used at all in the next RR phase as “unused.”

___ Using the text box below, wrote a <1-page narrative summarizing my space plans, focusing on non-standard rooms and situations.

___ Sought feedback from my lab members on my lab configuration plans.

___ Designated one member of my group as my lab’s COVID-19 Designated Monitor to help in the development, execution, and oversight of my plans.

COVID-19 Designated Monitor Name: _____

COVID-19 Designated Monitor MIT Email: _____

___ Completed the EHS “Laboratory checklist for ramp-up inspection” checklists ([Appendix 6](#))

___ Submitted my marked-up floor plans and this checklist to my AO by May 26.

CHECKLIST CONTINUES ON FOLLOWING PAGE

Please complete: Narrative (<1 page) of summarizing my space plans with a focus on non-standard rooms and situations.

APPENDIX 2: RR Planning Exercise B Checklist

___ Discussed lab protocol and expectations with each member of my group in order for personnel to make informed decision as to whether to return to campus. Shared the Acknowledgement Form in Appendix 3 with my staff ahead of the conversation; I mentioned that they will only be able to sign the form in an online system.

___ If I share a lab member with another PI, I coordinated with the other PI who will list that person in their spreadsheet.

___ Filled out the Research Ramp-Up Spreadsheet (Planning Exercise B).

___ Established a work schedule that distributes available hours and workspace across available personnel, noting that shift work is encouraged.

___ Using the text box below, wrote a brief narrative justifying why those personnel for whom I am requesting access need to be on campus.

___ Sought feedback from eligible lab members who have been cleared to return to work regarding my personnel plans and work schedules.

___ Considered the steps necessary to reduce lab activity rapidly if MIT considers a scale back to be necessary.

___ Communicated with my lab MIT EHS's "Working Alone Policy," if necessary (<https://ehs.mit.edu/about/policies/working-alone-policy/>).

___ Ensured that the returning staff will complete the required COVID-19/ EHS training before returning to campus.

___ Submitted my completed Research Ramp-Up Spreadsheet and this checklist to my AO (preferably by June 1).

CHECKLIST CONTINUES ON FOLLOWING PAGE

Please complete: For each of your returning personnel (including, where appropriate, yourself), provide a short narrative explaining why they need to access campus.

APPENDIX 3: Content of the “Acknowledgement Form”

This form will be available online. Details on how to access and use will follow.

COVID-19 RETURN TO WORK ON CAMPUS ACKNOWLEDGEMENT

The health and safety of the MIT community are our paramount concerns as MIT seeks to safely and equitably restore its educational, research, and administrative operations. The decision to return to campus at this time is voluntary and yours alone to make. However, if you decide to return, you are required to follow the conditions set forth below. The guidelines contained in the acknowledgement form below are intended to prevent the spread and reduce the potential risk of exposure to COVID-19 to our workforce and the surrounding community as employees gradually return to campus to carry on the important work of the Institute.

Please read and sign this form if you decide to return to campus at this time. As the global pandemic of COVID-19 continues to evolve, MIT remains committed to monitoring the situation closely and will update the conditions and this form as needed.

1. I, ___YOUR NAME_____, am deciding to return to work on MIT campus and agree to comply with the below terms and conditions of returning to campus during the COVID-19 crisis. I understand that my failure to do so may endanger others and may result in being barred from returning to campus and subject to other disciplinary measures.
2. I understand that I am not currently required to return to campus and that there are risks of returning to campus, including the risk of being exposed to the COVID-19 virus. I have not been pressured to return to work.
3. I understand that I will be asked to complete a health screening questionnaire each day to determine whether I have symptoms that may be associated with COVID-19 as established by the Center for Disease Control and Prevention (“CDC”).
4. Within the past fourteen (14) days, I have not tested positive for COVID-19, nor am I aware of coming into contact with anyone who I know has COVID-19 symptoms or has had a positive test for COVID-19.
5. I agree that if I exhibit symptoms of COVID-19, test positive for COVID-19, or come into close contact with someone who I know has symptoms of COVID-19 or who I know has tested positive for COVID-19, I will stay at home, self-isolate, notify Occupational Medicine/Student Health Department of MIT Medical and await further instructions. I further agree that I will cooperate with MIT Medical for all activities necessary to rapidly identify those with whom I may have had close contact, and follow any directions by MIT Medical or public health authorities to quarantine or remain in isolation.
6. I agree to follow the Commonwealth of Massachusetts COVID-19 workplace regulations, as well as the [CDC Guidance](#) and [MIT Guidance](#) for preventing the spread of COVID-19, including wearing a face mask or covering unless MIT Medical provides a medical exemption; exercising social distancing practices of at least six feet from others; washing hands often with soap and water for at least 20 seconds, or using an appropriate alcohol-based hand sanitizer (including that provided by MIT); properly covering my mouth and nose when sneezing or coughing; and regularly cleaning and disinfecting frequently touched surfaces in my workspace.

7. I understand that I must have a viral test prior to my return to campus and agree to any additional viral testing as directed by MIT. I further give permission to MIT to perform health monitoring of me, including, for example, taking my temperature or requiring a viral test, should MIT determine that such measures are prudent to maintain a safe campus environment.

8. I understand that MIT will take reasonable measures to ensure the confidential and private nature of the health monitoring information it may obtain from employees. However, I understand that MIT may share the testing results with certain MIT employees or city / state public-health officials with a legitimate need to know this information.

9. I agree to comply with instructions from certain MIT employees who may have been instructed to review access to campus and certain buildings. Instructions may include restricting access to campus and buildings via designated entrances and exits, scanning my MIT ID at designated access points, and signing in and out when reporting to or leaving campus.

10. I understand and agree MIT has the discretion to determine whether I am permitted to be on campus, or in a particular building, and at any time may require me to leave and not return to campus.

I HAVE READ THIS FORM BEFORE SIGNING IT AND VOLUNTARILY AGREE TO BE BOUND BY IT.

APPENDIX 4: Guidance for Discussing Return-to-Campus Plans with Group Members

Guidance for Discussing Return-to-Campus plans with Members of your Lab Group

As we move to return to our research on campus, the health and safety of every member of the MIT community are our paramount concerns. We seek to treat everyone equitably and with respect, and to help minimize safety and health risks.

Given this pandemic, there are complicated personal situations we must respect. For individual and community safety, we encourage those who can work remotely to do so. Most of us want to return to campus but some can't, even though they may want to.

Some of our staff will be told by MIT not to be on campus in order to safeguard the safety of others on campus, and, in some circumstances, to protect the health of the individual.

Some of our students and staff may have family concerns—concern for safety risks in commuting; concern for family members who are vulnerable; concern for their individual health; concern because of childcare issues, and many other legitimate reasons one may want to return, but decide they cannot do so at this time. In addition, some students and staff may initially decide that they can return to work, but later find their circumstances have changed and will need to return to remote work.

It is so important that the choice to return to campus cannot have any adverse effect on the manner in which you interact with any of your lab staff—regardless of whether you will be able to return to campus and some members of your lab will not, or whether you are not yet able to return to campus but some members of your lab group can. PIs and lab directors who fall into the latter category may wish to model the spirit of these guidelines by treating the reason for their own inability to return to campus as confidential.

For those who are not available to return to work, you should not pressure them in any way, retaliate for that choice, or even ask about the reasons they are not available. Treat the fact that someone might not be available as you would if you got word that a student or employee were getting an accommodation that was approved by an appropriate MIT group (e.g., Student Disability Services).

For those who are returning, we want to make sure the risks of returning to campus are managed as best we can. This means we will be requesting information from individuals and asking that they comply with state and federal guidelines, such as wearing masks, social distancing, and washing hands regularly. In addition, we want those returning to campus to do so voluntarily with the clear understanding that they can change their decision in the future if circumstances change. These measures are to prevent the spread and reduce the potential risk of exposure to COVID-19 to our workforce and the surrounding community.

We need your help on both fronts: (1) respect individual choices to return to work, do not pressure anyone to return to work, and do not react adversely to an individual's decision, and (2) provide meaningful remote options for them to continue to engage with the MIT community until they can return to MIT's campus.

For those who return to work, we ask that you respect and comply with the measures MIT is taking to reduce the potential risk of exposure and spread of COVID-19, and that you convey a similar expectation to those in your research program who return to campus.

We will be monitoring the situation closely and are excited about returning to do the important work of the Institute safely and equitably.

Prepared by members of the **Legal-Ethical-Equity** committee of the MIT Campus and Community Health Management System

14 May 2020

APPENDIX 5: Screenshot of the RR Planning Exercise B Spreadsheet

RR Phase 1: Planning Exercise B

Areas in yellow are computed for you and should not be edited.

Research personnel and staff that you (the PI) are responsible for		Activating research personnel for RR Phase 1										MIT Buildings that this person needs to work in during RR Phase 1 (excluding cores)						
Responsible PI:	Jane Smith	PI:	Tom Doe	tdoe	TRUE	TRUE	TRUE	10	10	Drive own vehicle	46							
PI kerberos:	jsmith		Max Smith	msmith	TRUE	FALSE	TRUE				46							
PI's DLC:	McGovern Institute for Brain Research (D_MCGGOVERN)		Kallyn Doe	kdoe	TRUE	TRUE	FALSE											
PI's Building:	46		Mark Doe	mdoe	TRUE	TRUE	TRUE	20	20	Wak	46							
Number of individuals that this PI is responsible for:	10	persons	Steve Smith	staves	TRUE	TRUE	TRUE	30	30	MBTA	46	68						
PI's maximum number of assigned person hours:	125	hours per week	Mark Smith	marksmith	TRUE	FALSE	FALSE											
PI's total number of currently assigned person hours:	90	hours per week	Mary Doe	maryd	TRUE	TRUE	TRUE	10	10	Taxi/Uber/Lyft	46							
You have hours available to assign			Joel Smith	joelsmith	TRUE	TRUE	FALSE											
			Mark Doe	mmdoe	TRUE	TRUE	FALSE											

Best guess at steady state weekly schedule (Researcher need not precisely adhere to this.)

Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday		Cores this person may need to utilize during RR Phase 1							Is there anything that you were unable to enter for this person? If so, please describe here		
start	end	start	end	start	end	start	end	start	end	start	end	start	end	Core 1	Core 2	Core 3	Core 4	Core 5	Core 6	Core 7			
9 AM	11 AM			9 AM	11 AM			9 AM	11 AM					DCM: Bldg 46 NHP	MIT Central Machine Shop								
9 AM	12 PM	1 PM	4 PM	9 AM	12 PM	1 PM	4 PM	9 AM	12 PM	1 PM	varies												
		1 PM	6 PM			1 PM	6 PM			1 PM	varies			DCM: Bldg 46 NHP									
9 AM	12 PM	1 PM	4 PM	9 AM	12 PM	1 PM	4 PM	9 AM	12 PM	1 PM	varies			DCM: Bldg 46 small animal	PKOWER Ips Core Facility	BIO: Biophysical Instrumentation Facility							
12 PM	5 PM							12 PM	5 PM					McGOVERN: 31 Magnet Service Facility									

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2

APPENDIX 6: EHS Checklists



Laboratory checklist for ramp up inspection – Phase 1

The following guide is provided to assist the EHS Office, EHS Coordinators, DLC Facility Managers and the Department of Facilities in the preparations for bringing their research laboratories back online from being scaled down. The Phase 1 inspection must be performed prior to researchers coming back to their laboratories, and the intent of the inspection is to complete an initial check to verify the space is ready for re-opening. Once spaces are cleared for ramp up, laboratory members will perform a more detailed, lab-specific inspection as a second phase.

Please wear lab appropriate PPE while conducting the inspection.

Laboratory checklist for ramp up inspection – Phase 1	
	Walkthrough of all spaces to check nothing is obviously out of place, missing, damaged, leaking, etc.
	Verify that utilities (electricity, water) are functional in the spaces. Submit Facilities Work Orders to report any utilities that aren't functioning properly.
	Flush all eyewashes in your labs for 1 to 2 minutes or until water flow is clear. Check that the temperature is tepid.
	Verify when safety shower was last tested. Within 6 months is on schedule; if greater than 6 months, enter a work order for DoF to test shower.
	Verify that the chemical fume hood is not in alarm. Check if hood has been tested within 12 months. If testing is out of date, contact EHS.
	Verify that biosafety cabinets have been certified within the last year. If a cabinet is out of date – work with responsible party to contact vendor to schedule a certification test.
	Check if exposure control device (local exhaust ventilation, snorkel, gas cabinet) has been tested within specified schedule (annual – orange sticker, and 3 year – yellow sticker). If testing is out of date, contact EHS.
	Verify that lab equipment, refrigerators, and freezers are functional.
	Check Toxic Gas Monitoring Systems (TGMS) functionality where applicable.
	Review the chemical waste SAA for any issues requiring attention. Submit a chemical waste pick-up online for any container you would like removed for any reason.
	Visually inspect chemical storage areas, chemical containers, and flammable storage cabinets for damage, leaks, pressure build up, etc.
	Note any remaining issues – enter DOF work orders for DoF issues. Other issues should be communicated to the responsible party who can fix the issue.

Laboratory checklist for ramp up inspection – Phase 2

The following guide is provided to assist researchers in their lab-specific preparations for bringing their research laboratories and support spaces back online from being scaled down. The Phase 2 inspection should be performed once lab personnel can re-enter lab space and should be completed prior to beginning any lab-related work or research.

As you ramp up research, please keep safety in mind and contact your DLC EHS Coordinator or the MIT Environment, Health & Safety Office by phone (617-452-3477) or email (environment@mit.edu) with questions or for assistance with risk assessment, safeguards, or hazardous materials management. For facility issues, contact the Department of Facilities at 617-253-4948 or your DLC Facilities Manager.

Lab personnel conducting this inspection should wear lab-appropriate PPE.

Laboratory checklist for ramp up inspection – Phase 2	
	Walkthrough of all spaces to check nothing is obviously out of place, missing, damaged, leaking, etc.
	Assess available PPE and PPE needs. Make sure to have enough PPE for planned experiments and lab activities.
	Consider need to expand or reconfigure PPE staging and donning and doffing locations to account for new lab protocols related to Covid-19, supplies needed to disinfect shared PPE.
	Verify state of SAAs, obtain red tags and containers if needed. Submit pickup requests for any chemical waste container which is full, dated, or is no longer needed.
	Verify that the chemical fume hood is functioning normally and is currently certified.
	Verify that biosafety cabinet is working properly and has been certified within the last year.
	Verify that exposure control device (local exhaust ventilation, snorkel, gas cabinet) is functionally normally and is currently certified.
	Verify that laboratory equipment is functional and safe to use. Refer any potential power-related issues to your DLC facilities manager and/or EHS Coordinator. Power up according to manufacturer's instruction or start-up checklist for complex equipment/systems.
	Verify refrigerators and freezers are functional, free of mold/growth, and that contents are intact and in good condition.
	Check Toxic Gas Monitoring Systems (TGMS) are functioning where applicable. Check calibration dates and schedule vendor to conduct calibration if needed.
	Verify levels of gases and cryogens for equipment.
	As compressed gas manifolds and systems are opened/charged, check for leaks as if new installation.
	Verify that hazardous materials are properly secured and stored, including testing of peroxide-forming chemicals which have been in storage.
	Ensure that hand-washing soap and paper towels are available.
	Verify that vacuum lines and natural gas lines are operational.
	Add water to floor drains and cup sinks. Run water at sinks. Plumbing drain traps may have dried out and there may be odors present related to these being empty.