Caltech Ready Continuity Planning for Lab Groups

The goal of this quick reference document is to highlight essential areas that lab groups should focus on when developing their continuity plans.

Gaining Access: https://caltech.kuali.co/ready or go to https://access.caltech.edu and click on the Caltech Ready link. Use your Caltech user name and password to log in.

If a plan exists for your Group but you don't have access, contact your Group's plan manager or cchrist@caltech.edu and request access.

To start a new plan, select **+** Start a New Plan.

Your Plan Name corresponds to your group name e.g. Smith Group

Add or remove a person to access your plan. Select Plan Details at the top, then select Manage Plan Access on the left. Everyone in your group and your Division Administrator should be granted access.

Planning Navigation & **Guidance.** Planning steps are located along the top of the program. Plan administration is located along the left. On the right side of the screen you will find guidance panels.

Department Identification: Head of unit is the PI. Please note that they will receive an email that a plan is being created and will have access.

Critical Functions: Identify what your group does. You can divide it into specific functions or be broad about the area of study. e.g. chemical synthesis, data processing, computer modelling, etc….

- Assign a level of criticality to each critical function. Definitions for each level are on the screen.
- Provide a description for each non-deferrable critical function.
- Skip 'Peak Periods' unless it applies.
- Upload or reference any protocols or documents you'd want available to perform the function
- Identify any dependencies on others to perform this function
- Describe the consequences of a slow recovery. Provide details of the impact. Most likely in the 'disruption to research' box
- How to cope.   What if you lost your lab, some key people could not get to campus, key resources? Samples? Data? What could you do, what can you do now to minimize loss or speed recovery? Capture any ideas in the action items tab. E.g. cross train certain tasks, identify alternate labs, cold storage locations….

Key Resources:
This section identifies key resources you need to continue research -i.e. personnel, equipment, and supplies
- **Staff Basics** Every unit is asked to keep its own list of home contact information for faculty & staff. Your list should be in a format of your choosing and held by enough people to be useful. Identify how you will communicate with each other and the Division. Who has decision making authority for the lab if your PI is unavailable?
- **Work from Home** Identify those lab members who could work from home and what could be done while at home?
- **Teams:** Are there teams that will be important to help your department cope with adverse events? Teams may include external members in addition to your own staff.
- **Skills:** Add skills that are critical to performing critical functions in your lab
- Staffing Requirements: Add any staffing/personnel requirements and the number of people needed to perform critical functions in your lab

- **Documents:** Are there any additional documents you would want access to? You will likely identify additional documents once you've completed the equipment and supplies section It's also a good idea to upload some pictures of your lab in its current state.
- **Equipment & Supplies –** Even though there are only 2 text boxes "Other Equipment" and "Supplies" this is a critical element of the continuity plan. Spend time considering the questions below and use the Documents tab to add files, schematics, and details as appropriate.
- **Equipment and Instruments**
    - Does your lab group rely on highly specialized equipment? Some equipment or instruments are one-of-a-kind that have taken years to construct while others are fairly common, but very expensive. How would you continue your research if it were damaged or destroyed? How long would it take to replace? What would you do while waiting for the new equipment to be installed? Can it be seismically braced?
    - Determine if critical equipment is connected to backup or emergency power
    - For highly customized equipment or experimental apparatus, keep duplicate copies of drawings, diagrams, plans, or specifications
    - Identify equipment with special utility requirements, such as chilled water, high voltage, nitrogen etc.
- **Temperature-sensitive equipment**
    - Maintain a list of equipment containing temperature-sensitive specimens/materials (i.e., refrigerators, freezers, incubators, etc.)
    - Know the emergency power systems for your lab and what equipment is connected to it
    - Ensure that temperature-monitoring alarms, if equipped, are working
    - Know the maximum length of time the equipment can be without power, but still maintain acceptable temperature
    - Maintain a list of all temperature-sensitive specimens/materials in each location and the approximate time limit before the specimens/materials will be adversely affected by a temperature change. This will help you to prioritize the relocation of specimens/materials if necessary
- **Supplies and Vendors**
    - Identify specialized supplies that you rely on. This include supplies that are difficult to obtain, require special authorization or handling, or are only available from limited vendors
    - Identify key vendors of essential equipment, supplies, and service contracts
    - Develop contact lists including routine and emergency after-hours contact information
    - Identify an alternate backup vendor for essential must-have items
    - Where feasible, increase standing inventories of crucial supplies and reagents, especially those that typically rely on just-in-time ordering
- **Specimens and Materials**
    - Maintain accurate inventory records for unique specimens and materials
    - Develop redundant storage for irreplaceable specimens (cell lines, DNA, etc) Consider splitting the storage of vital specimens --separating the specimens and storing separate collections in different locations.
- **Loss of Power**
    - Verify that freezers, refrigerators, incubators, and other temperature-sensitive equipment holding critical materials are connected to an emergency power supply, if available for your lab. Consult with your facilities manager or Division officer if you have questions about what emergency power is available

- Consider adding an uninterruptible power supply (UPS) for equipment highly sensitive to slight power delays or fluctuations, if available
- Know how long freezers, refrigerators, incubators, etc. NOT connected to emergency power supply will maintain proper temperatures in the event of a power failure
- Maintain a list of essential equipment that may be damaged by a power surge when the power is restored
- Maintain a list of essential equipment that may have an automatic "ON" switch and may come on by itself when power is restored, even if no one is around. Consider unplugging or turning off this equipment during the outage to avoid harmful effects when the power returns
- Identify equipment that may need to be reset or restarted when the power is restored
- Ensure that seals to freezers are intact. Most freezers will keep their temperature steady or below freezing for several hours
- Identify other freezers in your lab, neighboring labs or Division that may have their own backup power or run on CO_2 or liquid nitrogen which may be unaffected by a power outage and discuss the possibility of sharing freezer space with them if necessary
- Consider other emergency cold storage options

Information Technology: Identify how data is stored and what IT tools are required. Ensure that research notes, notebooks, letters, documents, spreadsheets, etc. are backed up to a network drive every day. Keep duplicate copies of irreplaceable notes, notebooks, manuscripts, and other documents in a safe location away from your lab. Regularly scan and save these items onto a network drive or onto an encrypted USB storage device. Regularly back up all information stored on laptops and tablets.

Instruction: If your lab conducts instruction, identify how this would continue if there was a loss of power, personnel, or facility. Work with the Division to identify existing planning efforts.

Complete or Finished Updating?
Go back to 'Plan Details', select 'Change Plan Status' and mark 'current'. Note that action items do not need to be complete for your plan to be marked complete or current. Periodically review and update your plan as needed.

Additional assistance is available. Contact ext. 6727 or email cchrist@caltech.edu.