Continuity of Operations Plan (COOP) for

Richard Amasino Lab, Department of Biochemistry

Amasino Lab is on the 2nd floor of DeLuca Biochemistry Laboratories (UW Building Number 0205). The lab spaces consist of a main lab of 1479 sq ft of contiguous space and has additional sq footage (which is not counted in our occupancy determination) consisting of rooms that are part of the lab (207A, 207B, 207C, 207D) and across the hall from the main lab (210). We share a coldroom across the hall from the main lab (212) with the Bednarek lab. Finally, we have a room with plant growth chambers in the sub-basement of the building (B246).

(please check specific department/college/university policies as needed, see http://covid19.wisc.edu;
Lists of items are not exhaustive but intended to help think through local situation)

This template addresses three areas: (1) Contacts and background information, (2) Planning to operate under different risk levels, (3) Planning to operate with disruption or shutdown.

CONTACTS AND BACKGROUND

Staffing

1. Essential personnel

Name	Primary phone	Secondary phone	Email
Kevin Mayer			kmayer5@wisc.edu
Weiya Li			wli475@wisc.edu
Bing Liu			bliu279@wisc.edu
Richard Amasino			amasino@biochem.wisc.edu

2. Non-essential Personnel

Name	Primary phone	Secondary phone	Email
none			

External resources

- **Bio safety contact –** Karen Demick (karen.demick@wisc.edu). Our lab operates under BSL1; we do not have any pathogens in the lab, only lab strains of E. coli.

- **Chem safety contact –** Tilak Chandra (tilak.chandra@wisc.edu)

Continuity of authority

Who is responsible for the lab, and who are two backup decision-makers in case the responsible individual is unable to make decisions on operation or shutdown? Provide name, email, and best emergency phone number for each.

a. (PI) Richard Amasino amasino@biochem.wisc.edu
b. Kevin Mayer kmayer5@wisc.edu
c. Bing Liu bliu279@wisc.edu
d. Weiya Li wli475@wisc.edu

Communication Plan

The laboratory uses Teams meetings to communicate as a full group every week and this is supplemented by immediate communication as needed via a WhatsApp text and videoconference link that we all share and to which we have full-time access on our cell phones. We also communicate by phone for individual conversations and share documents via email and Teams.

Remote Data access, exchange, and security

All users will collect data on appropriate laboratory instruments or other computers and backed up in Box accounts. Files related to active projects and group presentations are shared via the Files feature of Microsoft Teams.

Research Priorities:

The Amasino lab is funded by the US Department of Energy (via the Great Lakes Bioenergy Research Center) and the National Science Foundation. Our ongoing research is designed to better understand the processes that regulate the timing of when plants flower and to design ways to modify the timing of flowering to increase the biomass yields of bioenergy crops.

Kevin Mayer and Weiya Li work on National Science Foundation project. Kevin is a graduate student who will hopefully complete his Ph.D. in Spring of 2021. Weiya is a postdoc.

Bing Liu works on the aspect of our flowering research that is designed to inform how biomass yields of bioenergy crops might be increased by manipulating when these crops flower.

What to do if someone feels unwell?

Lab members will be asked to review the CDC and campus policies related to temperature monitoring and to monitor their temperature and other wellness indicators on a daily basis. Researchers will notify the PI and all lab members via our lab WhatsApp link if they have a fever of 100.4°F (38°C) or higher or other symptoms (e.g. shortness of breath, cough) and will stay at home.

Lab members that feel unwell or live with someone that feels unwell will self-isolate at their personal residence. If the symptoms last longer than one day, the researcher should obtain a free COVID-19 test to inform subsequent decisions. Lab members are familiar with the current CDC documents listing symptoms of COVID-19 infection (https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms.pdf) and proper handwashing (https://www.cdc.gov/handwashing/materials.html).

OPERATIONS UNDER DIFFERENT RISK LEVELS

1. *Operation as normal.*

Labs/offices staffed during business hours and after hours. Lab meetings in person.

2. *Operation with limited risk – e.g., no known cases in the municipality.*

Labs/offices staffed during business hours and after hours with essential personnel members only.

- General SOPs in place for minimizing community spread (see below).
- Particular vigilance for
    - Personal hygiene
    - Space hygiene
    - Social distancing
    - Symptom monitoring (see above)
- Lab meetings via videoconferencing. Constant contact via a WhatsApp text and videoconferencing group.

3. ***Current:** Operation with heightened risk – e.g., known cases on campus.*

Our lab group has reviewed and will regularly re-review as a group discussion the UW-Madison guidelines and recommendations on research.

General SOPs for Minimizing community spread:

Researchers will review the following UW-Madison guidelines and recommendations individually and in a research group meeting focusing on research restart before entering campus research space:

- Overview portal for UW-Madison COVID-19 information: https://covid19.wisc.edu
- UW Madison guidance on face coverings: https://facilities.fpm.wisc.edu/returning-to-campus-safely/
- OVCRGE guidelines on phased resumption of research: https://research.wisc.edu/reboot-phase1/
- Recommendations to bring labs back on-line: https://d1cjb8q1w2lzm7.cloudfront.net/wp-content/uploads/sites/22/2020/05/EHS-ADM-GUI-002.pdf.
- This COOP plan for our lab which will be shared with all researchers.
- The research floor COOP which will be shared with all researchers on the second floor of our research building.

In summary, researchers will practice state and federal recommendations for minimizing exposure and transmission risks including physical distancing, maintaining cleanliness in all parts of the workspace, and diligent hygiene practice including constant, thorough hand washing, covering of coughs. Other lab requirements for use of personal protective equipment within the worksite is already specified in the lab Biological Safety and Chemical Safety protocols will be continued.

Researchers will wear face masks whenever present in campus public spaces or whenever two or more researchers are present in the lab as indicated in the campus guidance: https://facilities.fpm.wisc.edu/returning-to-campus-safely/.

Maintaining the community of the lab:

As discussed above, the lab group is in regular contacts via MS Teams meetings and WhatsApp short video calls and text group messaging.

The lab will continue to enforce guidelines and practices as outlined in its Chemical Hygiene Plan and BioSafety protocols. Special emphasis will be placed on the potential for any researcher to become unavailable for an extended period, and thus at the end of each work shift lab spaces will be cleaned and samples stored.

SCENARIO PLANNING FOR DIFFERENT LEVELS OF DISRUPTION

Instructions: Listed below are three potential scenarios that might result from COVID-19. Under the scenarios listed, provide a step by step response detailing how your lab would respond to the scenario. In addition to the 3 scenarios listed, additional lab specific scenarios can be added, if needed. The section, "other concerns" provide additional information that might should be included in your COOP.

Current Scenario – Approved Research Restart: The lab requests restart of research activities being carried out prior to the campus shutdown.

The Amasino lab (Room 207) is a main lab with 1479 sq ft of contiguous lab space, so requests a maximum occupancy of 4 researchers at any time. Occupants of the main lab will practice physical distancing and will wear masks. Our lab is configured to have several internal rooms (207A, 207B, 207C, 207D, 210 (storage) and we share with the Bednarek lab a coldroom (212 shared) and a growth chamber room (B246). The size of these rooms is such that only one researcher will be present at a time and we will coordinate researchers presence in these rooms either by Google docs or WhatsApp text group so that researchers do not need to visit these rooms to assess availability. Furthermore, we will have a 20-minute period of air clearing between occupants.

Our researchers (all male) will use restroom 214.

Although the recommendation based on 350 sq ft per person permits 4 people in the 207 main lab, we will strive to keep the number at 2 by coordinating with each other when research will begin and end via our WhatsApp connection and utilizing morning and afternoon shifts. Researchers understand that time in the lab should be carefully planned to accomplish benchwork efficiently and that data analysis, literature review, and writing should occur off site.

Scenario 1 - Disruption: Several members of the lab are out sick / unavailable for an extended period, and some suppliers or internal dependencies are at risk; Add as many steps/bullets as needed.

Ongoing experiments will be stopped and materials preserved for future analysis. For live plants, other researchers will maintain plants until seed is produced for storage.

Scenario 2 - Suspension: Students not allowed on campus; research and lab activities suspended; infrastructure support systems remain operational; Add as many steps/bullets as needed.

If suspension from the anticipated research restart is needed, the lab will follow procedures used to shut down the lab at campus order on March 16. Completion of this process took 1 day.

Ongoing experiments will be stopped immediately, and biological samples, reagents and other research materials will be stored for long-term viability. Computers and instruments will be shut down. Biochemistry building personnel will ensure operation of refrigerators, cold rooms, and freezers where samples are stored.

We would request limited access to our growth chambers to maintain plants until seed is set.

Scenario 3 - Shutdown: For a campus shutdown planned for longer than two weeks, or else if the campus is inaccessible, we cannot assume critical infrastructure would be available or is at least unreliable. Place all instruments and experiments in a safe idle state that does not require services. Additional details in this scenario relate to equipment shutdown and the like.

If shutdown from the anticipated research restart is needed, the lab will follow procedures used to shut down the lab at campus order on March 16. Completion of this process took 1 day.

All samples and research materials will be stored for long-term viability. Critical materials will be transferred to a freezer connected to a backed-up power supply. All instruments and computers will be shut down.

We would request limited access to our growth chambers to maintain plants until seed is set.

Other concerns to consider in scenario planning

What facilities are at risk of harm to the facility, its contents, to campus or to the public (e.g., animals that must be fed, samples that must be secured, equipment or hazardous materials that must be maintained or shut down)?

No materials in the lab pose a safety risk if left unattended.

If the lab must be staffed to avoid risk or harm, who will act as the primary minimum essential personnel to keep it operating? If the lab mustn't be staffed, state that it will shut down to ensure no risk or harm. Provide name, email, and best emergency phone number for each.

The main lab does not require staffing to avoid risk or harm. Biochemistry building personnel will monitor freezers, refigerators, and cold rooms storing research materials. Emergency contacts for the lab are Richard Amasino amasino@biochem.wisc.edu and Kevin Mayer kmayer5@wisc.edu .