Continuity of Operations Plan (COOP) for Landick Lab UW-Madison  rev. 01.14.21

***Individual Lab COOPs should be shared with the Department Chair/Center Director, and the Administrator in case the lead faculty/PI are not available.***

(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**
   Robert Landick rlandick@wisc.edu
   Rachel Mooney ramooney@wisc.edu

   **Postdocs**
   Xinyun Cao (Sherry)  xcao9@wisc.edu
   Michael Engstrom mengstrom@wisc.edu
   Balendra Sah bsah@wisc.edu
   Michael Wolfe mwolfe6@wisc.edu

   **Graduate Students/Interns**
   Christiana Binkley cgbinkley@wisc.edu
   Christine Hustmyer hustmyer@wisc.edu
   Yang Liu yliu486@wisc.edu
   Yu Bao ybao29@wisc.edu
   James Liu jliu893@wisc.edu
   Jason Saba jsaba@wisc.edu
   Junqiao Zhu jzhu366@wisc.edu
   Bailey Marshall bamarshall2@wisc.edu
   Expery Omollo omollo@wisc.edu

   **Undergraduates**
   Isabella Marsden imarsden@wisc.edu

   **Part-time Staff Lab Support**
   Admin Asst-working remotely during phase 1 of research restart
   Heidi Christian hchristian@wisc.edu

   **Part-time Staff Lab Support working remotely at least initially during phase 1 of research restart**

2. **Non-essential Personnel**
   Allison Czora czora@wisc.edu (currently on leave)
   Ronni Brent rbrent2@wisc.edu (currently on leave)
External resources

- List names, cell phone numbers, email: point of contact for Facilities, Biosafety, Chem Safety, Animal Resources, etc.

All biosafety, radiation safety, and chemical safety information is maintained on the lab wiki along with detailed instructions on what to do in the case of various types of incidents. In brief, these contacts are:

- **Facilities**
  - KYLE BOLDEN, Biosafety Advisor kyle.boldon@wisc.edu
- **Biosafety**
  - KATHY KRASNY, Biosafety Advisor Kathy.Krasny@wisc.edu
- **Radiation Safety**
  - ELIZABETH OSEID, Health Physicist Elizabeth.Oseid@wisc.edu
- **Chemical Safety**
  - LISA LENERTZ, Chemical Safety Specialist lenertzlinde@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.

1. Robert Landick rlandick@wisc.edu
2. Rachel Mooney ramooney@wisc.edu
3. Xinyun Cao (Sherry) xcao9@wisc.edu

Communication

Group email address is landicklab@office365.wisc.edu (see list above for individual email addresses)

The group maintains an active wiki to organize operational and scientific information (wiki.biochem.wisc.edu/landicklab)

The group is in constant contact using Slack (Slack: Landick Group)

All remote lab meetings use Zoom, for which the lab maintains an account, or Webex. The group holds weekly lab meetings and more frequent subgroup meetings on an as needed basis.

Remote Data access, exchange, and security

All data is maintained on Biochemistry Department servers, GLBRC servers, UW Box, or Dropbox VPN to resources is via biochem.vpn.wisc.edu or wei.vpn.wisc.edu

The group maintains an active wiki to organize operational and scientific information (wiki.biochem.wisc.edu/landicklab)

The group maintains filemaker databases on Biochemistry Dept servers for crucial resources (filemaker.biochem.wisc.edu)
Research Priorities:

Three research projects are ongoing with only high-priority experiments to be undertaken on site during phase 1: (1) Inhibitor Screening for SARS-CoV-2 RNA Polymerase (UW funding); (2) Structure/Function of Transcription Complex Regulation (NIH-funded); and (3) Engineering Microbes for Lignocellulosic Bioproduct and Biofuel Synthesis (DOE/GLBRC-funded).

All experiments in the lab can be shut down with 24-hour notice without loss of materials. All key research materials are stored in –20 and –80 freezers on the fifth and sixth floors of the Microbial Sciences Building. All ongoing experimental materials can be stored with 24-hour notice.

Emergency shutdown of the lab is possible with minimal loss of research materials, because duplicates of almost all key materials are in on-going long-term storage in –80 freezers.

What to do if someone feels unwell?

We comply with the following recommendations

If anyone feels unwell or has been in contact with somebody who is ill or tested positive for COVID-19, they will alert the PI immediately and not come to the lab. The PI will communicate with the group. Follow the campus guidelines (http://covid19.wisc.edu).

Researchers who feel unwell or have family members or roommates that feel unwell will self-isolate at their personal residence. If the symptoms last longer than one day, the researcher should have a free COVID-19 test performed to inform subsequent decisions.

Posters are posted with symptoms available from the CDC (see e.g., https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms.pdf), as are those about handwashing (see e.g., https://www.cdc.gov/handwashing/materials.html).

OPERATIONS UNDER DIFFERENT RISK LEVELS

We adhere to the following guidelines. During Phase 1 of Research Restart, we will adhere to to Risk Level #3 below whether or not there are known cases on campus.

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 per videoconferencing.
- Heightened communications - Buddy system in place for animal work. Look for text and email messages from PI

3. **Operation with heightened risk – e.g., known cases on campus, (applies to phase 1 research).**
Labs/offices staffed only by essential employees, limited hours. Lab meetings held by videoconferencing during regular lab meeting schedule.

- General SOPs in place for minimizing community spread (see next page).
- Minimal workflows in place  
  - Critical spaces that must be staffed daily:
    - Examples: insectary, vivarium, etc.
    - Non-essential spaces and critical check-ups for spaces/equipment
    - Lab room - liquid nitrogen and freezers - check weekly
    - Lab room - freezers, check weekly
- Lab meetings per videoconferencing.

Heightened communications – Buddy system in place for lab areas and collections. Look for text and email messages from PI.

**General SOPs for Minimizing community spread:**

Current SOPs in the lab require daily surface sterilization of work spaces using 70% EtOH, and frequent hand washing. In addition, we will implement the following steps to minimize the possibility for virus transmission:

1. We will strictly enforce access to all laboratory spaces by authorized lab personnel only. All other personnel entering laboratory spaces must seek permission by PI first. This includes facility personnel, as well as personnel from external contractors. Exceptions are emergency situations that pose immediate risk, such as fire.
2. Occupancy of all labs that are assigned to the PI will be limited to ensure adequate distancing to 6 ft, as currently recommended by the CDC.
3. Only healthy personnel, regardless of the level of symptoms, are allowed to enter the lab spaces.
4. Upon entering any laboratory space, personnel must wash hands immediately and in accordance with CDC guidelines, before touching any surfaces (see above).
5. Working surfaces will be sterilized with 70% Ethanol prior to assuming work.
6. In-person communication will use at least 6 feet distancing.
7. No more than 1 person per 250 sq ft can be in lab at the same time. This corresponds to 6 people for 5435–5445 MSB and 4 people for 5545 MSB.
8. Rooms smaller than 350 sq ft. will be occupied only transiently by one person at a time.
9. All shared equipment will be disinfected before and after each use.
10. All research personnel will wear cloth or paper masks at all times in the Microbial Sciences Building.

Resource from OSHA, [https://www.osha.gov/Publications/OSHA3990.pdf](https://www.osha.gov/Publications/OSHA3990.pdf),

**In addition, Landick lab essential research operations will adhere to the following procedures to minimize the risk of community spread.**

- Essential personnel will travel to MSB directly from their respective homes without any intermediate stops
- Essential personnel will disinfect themselves and their clothing before leaving home to come to lab
• Essential personnel will enter and leave MSB and lab wearing masks and using gloves or disinfectant wipes to treat all touched surfaces
• Essential personnel will enter and leave lab via a decontamination room in which they will wash their hands, change street shoes to disinfected lab shoes, and leave all objects not required for lab work (e.g., backpacks, coats, street shoes, etc.).
• Essential personnel will maintain 6’ spacing during work in MSB
• Essential personnel will wear gloves and cloth masks while working in lab
• Lab surfaces including door handles and frequently touched objects will be regularly disinfected during work
• All work that can safely and reasonably be performed remotely will be done remotely
• Time in lab will be minimized to that required to complete research tasks

Maintaining the community of the lab:
Our lab is in daily contact and interaction via Slack and Zoom during periods of suspension of nonessential research operations at UW-Madison. We increase the frequency of meetings during such periods to ensure maintenance of lab community.

During periods of disruption to lab activities, the PI emails the lab every morning to maintain communication and to solicit any concern.

- We encourage everybody to check in with each other via the group chat.
- Remote lab meetings will be held via video conferencing, at the usual scheduled times.

In addition to these measures, we will comply with all regulations, implemented by the university, and accessible through http://covid19.wisc.edu.

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.

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.

• Example Step: Shut down hazardous process materials
• Example Step: Selected staff would work on non-hazardous cleanroom maintenance projects, protected by social distancing if necessary

  1. Research operations will continue with social distancing as necessary
  2. Individual research projects may be put on hold if researchers are unable to work.

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.

  1. Non-essential research operations will be shut down.
  2. R. Landick will periodically monitor –80 freezers.
**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.

- **Example step:** Instruments would be shut down and placed in a safe idle state within _____ hours.
- **Example step:** There is a potential for damage to especially vacuum pumps if they sit idle for extended periods of time. This may require costly repairs. Designate rotating personnel to attend if necessary.

1. All materials stored. All equipment except freezers turned off.
2. If unable to access campus, will rely on remote monitoring equipment for ~80s.

For this scenario, also consider...

Restart will require a _1_ day to fully clean the lab, followed by another 1__ day to restart and test equipment.

What is the process for safely shutting down and/or securing the lab?

1. All materials stored. All equipment except freezers turned off.
2. If possible, R. Landick will monitor freezers periodically.

**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)?

1. Hazardous gases
2. Animal care
3. Water cooled equipment that can be damaged by loss of water
4. Loss of nitrogen purges
5. Static tanks/containers of chemicals in hoods and loss of exhaust
6. Vacuum systems pump and valve off
7. Turn off UV lamps
8. Ensure all chemical bottles are in storage cabinets and all bottles have secure lids.
9. Cap all solvent carboys
10. Empty all trash containers – remove any chemical contaminated wipes

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.
1. Primary walk-thru checker:
2. Secondary walk-thru checker
3. Tertiary back up walk-thru checker

The lab cab be safely shut down.
APPENDUM, INFORMATIONAL, the information below was shared with by Vice Chancellor for Research & Graduate Education on March 15, 2020 with the VCRGE Center Directors to assist them in continuity planning. It is included here to further assist your planning activities.

Center directors;

See the message below from the Chancellor. The message provides guidance to ensure the safety of our community while offering the least disruption to our work. To summarize:

- Please maintain your center research activities to the extent possible.
- Review your COOP plans and activate as appropriate.
- Formulate and disseminate plans that guide ramping down and then suspension of research if needed.
- Encourage remote work for those staff that can do so without disruption, while others (i.e., those you identified as essential personnel in your COOP plans) are expected to be on campus.
- Continue to practice recommendations and procedures that reduce the spread of the virus.

While most research can be conducted with appropriate social distancing and typical hygienic steps, the COVID-19 outbreak has presented us with significant challenges. I thank you for your continued leadership in these challenging times. The RSP webpage, which is updated regularly, is an excellent source of information about sponsored projects: https://rsp.wisc.edu/COVID.cfm Some specific actions you can take include:

- Identify critical equipment that must remain in service, then plan for how to manage or shut down this equipment if necessary.
- Strive to keep all lab activities within reasonable business hours — including those involving work with hazardous material or processes. Doing so enhances the ability of Research Safety to respond if services are needed.
- Continue or expand cross-training among your staff to support critical functions.
- Identify personnel who are essential to maintain critical research and ensure they know what to do if operations are interrupted or suspended.
- Distribute your communications plan to personnel. If necessary, develop this plan and designate contacts to help disseminate information in a timely manner.
- Identify priorities and plan for critical experiments in case of limited access.
- Take steps to ensure remote access to files, data, servers, etc., except with regard to research with sensitive or restricted data.
- Research must be conducted within appropriate space designated for research activities. Personnel should not remove research materials other than laptops, data storage devices, etc. to alternative locations, including home.
- Plan for remote proposal submission.
- Be sure to check travel restrictions in advance of making travel plans.