

**Continuity of Operations Plan (COOP) for  
Kimble Lab  
Department of Biochemistry**

**CONTACTS AND BACKGROUND**

**Staffing**

1. Essential personnel for Phase II

<b>Name</b>	<b>Email</b>
Judith Kimble	jekimble@wisc.edu
Ahlan Sabah Ferdous	aferdous@wisc.edu
Sarah Crittenden	slcritte@wisc.edu
Peggy Kroll-Conner	plkrollc@wisc.edu
Jen Woodworth	woodworth2@wisc.edu
Jane Selegue	jselegue@wisc.edu
Tina Lynch	trlynch2@wisc.edu
Cazza Czerniak	cczerniak@wisc.edu
Mingyu Xue (undergraduate)	mxue26@wisc.edu

2. Non-essential Personnel for Phase II

<b>Name</b>	<b>Email</b>
Carol Pfeffer	cpfeffer@wisc.edu
Sarah Robinson- Thiewes	slrobinson3@wisc.edu

3. Essential personnel for Phase I who have been removed from Phase II

<b>Name</b>	<b>Email</b>
Sadie Jackson	ssjackson3@wisc.edu
Kyle Krueger	kwkrueger@wisc.edu

**Request that undergraduate, Mingyu Xue return to lab:** IPiB student Tina Lynch is the supervisor for requested undergraduate, Mingyu Xue. They have already worked together for over a year, and Mingyu has mastered all techniques required for her Phase II experiments. Both Tina and Mingyu will work the afternoon shift, but discuss experimental design and data interpretation virtually.

## External resources

- **Bio safety contact** – Andrea Ladd. Cell phone: Email: [andrea.ladd@wisc.edu](mailto:andrea.ladd@wisc.edu)
- **Chem safety contact** – Tilak Chandra. Cell phone : Email: [tilak.chandra@wisc.edu](mailto:tilak.chandra@wisc.edu)
- **Facilities contact** – Julie Kennedy. Cell phone: Email: [jakennedy4@wisc.edu](mailto:jakennedy4@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. Judith Kimble. Email: [jekimble@wisc.edu](mailto:jekimble@wisc.edu).
- b. Sarah Crittenden Email: [slcritte@wisc.edu](mailto:slcritte@wisc.edu),
- c. Peggy Kroll-Conner Email: [plkrollc@wisc.edu](mailto:plkrollc@wisc.edu),

## Communication Plan

All members of the lab communicate via email, phone (text), KimbleLab Slack and Webex.

## Remote Data access, exchange, and security

All personnel are using the Biochem server for Data access and exchange.

## Research Priorities:

1. *Maintenance of nematode stocks and creation of new stocks:* Nematode stocks will be maintained by **Peggy Kroll-Conner**. Nematodes that are not being used for priority experiments are frozen and stored in duplicate in a  $-80^{\circ}$  freezer and a liquid nitrogen tank located in room 345. Checking and refilling the tank requires approximately 30 minutes of his time once weekly.
2. *Maintenance of essential equipment:* Kimble lab microscopes, including a Leica confocal microscope, will be maintained by **Sarah Crittenden**. Scope maintenance requires alignment and cleaning, typically once a week. The microinjection room used to make gene-edited nematodes will be maintained by **Cazza Czerniak**. The qPCR machine will be maintained by **Ahlan Sabah Ferdous**. All nematode work, both genetics and biochemistry, requires the use of agar-filled Petri dishes that are made with an automatic pump in a plate pouring facility. **Cazza Czerniak**, **Jane Selegue** and **Jen Wordworth** will work in shifts for each of three days to pour plates required for nematode growth, and essential for both the genetics and biochemistry done in the lab. They will also maintain the plate pouring facility free of contamination, which requires daily care.
3. *Wet-lab experiments:* **Judith Kimble**, **Sarah Crittenden**, **Peggy Kroll-Conner**, **Ahlan Sabah Ferdous**, **Tina Lynch**, **Jane Selegue**, **Cazza Czerniak**, **Jen Wordworth** and **Mingyu Xue (undergraduate)** will perform experiments that are essential to complete the Aims of a federally funded NIH R01 grant directed at understanding the molecular basis of stem cell regulation; the graduate students' experiments are essential for them to complete their theses. All researchers in the lab will conduct nematode genetics experiments, including creation of new nematode strains by CRISPR gene editing. **Sarah Crittenden**, **Tina Lynch**, **Jane Selegue**, **Cazza Czerniak** and **Jen Wordworth** also conduct single

molecule FISH and immunostaining analyses of RNA and protein molecules, respectively. **Ahlan Sabah Ferdous** focuses on co-immunoprecipitation of proteins from nematodes to identify protein-protein and protein-RNA complexes. All personnel are expected to work efficiently with the minimum amount of time possible spent in the laboratory. All personnel will work on a staggered schedule so that no more than one person per 200 ft.<sup>2</sup> is present in the laboratory space at any given time. Experimental design and data analysis will be performed from home.

### **What to do if someone feels unwell?**

The following plan assumes that proper social distancing and hygiene has been practiced in the lab and in the research building at all times so that the prospects of COVID spread are minimized. Each lab member will have a personal thermometer that will be used to check their temperature every day. If any researcher in the lab exhibits an elevated temperature or feels unwell, they will follow the protocol.

1. **Notify PI.** *Immediately notify PI (Wickens), and immediately seek testing for COVID-19.*
2. **Quarantine.** *Remain at home and in quarantine.* If symptoms are severe, the affected person will be encouraged to consult with a doctor.
3. **Notify researchers in the lab and on the floor.** All researchers who were in the lab at the same time (within the prior two weeks) will also stay home and quarantine until the affected researcher has a COVID test result. The result of the COVID test will be reported to the lab PI, department chair and to other department PIs.
4. **If the COVID test is positive,** all researchers in the lab will quarantine for two weeks. The lab itself will be closed and locked. Any shared facilities that the researcher has used will be disinfected.
5. **Criteria for return.** Research will resume only if (a) no other researcher develops symptoms in that two week interval, (b) no other cases have been reported on the same research floor, and (c) after disinfection of all common lab surfaces.

## **OPERATIONS UNDER DIFFERENT RISK LEVELS**

### **1. Operation as normal**

Normal operation is not anticipated for the foreseeable future.

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

- General SOPs in place for minimizing community spread (see below).
- Vigilance for
  - Hand washing and personal hygiene
  - Space sanitization according to space-specific procedures
  - Social distancing
  - Symptom monitoring (see above)
- Lab meetings per videoconferencing.
- Communications longer than a few minutes will be done by slack; communications of a few minutes will be done with social distancing of at least 6 feet and both persons wearing masks.

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

- Labs will be staffed only by essential employees who need to work at the bench and for limited hours. Lab meetings will be held by videoconferencing during regular lab meeting schedule.

- General SOPs in place for minimizing community spread (see below).

All lab personnel now have offices at home and will conduct their computer work remotely. This will include writing, database searching, data analysis and learning new skills from online tutorials.

### **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. **Access.** 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.** 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. Specifically:
  - a. 0205-345 – no more than five people at a time (one per bay).
  - b. 0205-357 – no more than three people at a time (one per bay).
  - c. 0205-345A, 345B, 345C, 347, 357A, 3567B, 360 and 353. These are small rooms adjoining the primary lab space. Only one person at a time will be permitted and they will come from the primary lab so will not add population density.
  - d. All rooms. We will continue to work in shifts to keep population density at essentially Phase I levels.
3. **Only healthy personnel,** regardless of the level of symptoms, are allowed to enter the lab spaces.
4. **Immediate hand washing.** Upon entering any lab space, personnel must wash hands immediately and in accordance with CDC guidelines, before touching any surfaces (see above).
5. **Surface sterilization.** Working surfaces will be sterilized with 70% Ethanol prior to assuming work.
6. **Social distancing.** In-person communication will use at least 6 feet distancing and wearing masks.
7. **Masks.** Whenever two or more people are present in 0205-345 or 0205-357 at the same time, they must wear a mask that covers the nose and mouth.
8. **Doors handles and light switches.** Upon entering and leaving any laboratory space, personel must sanitize door handles and other common surfaces (e.g. light switches).
9. **Shared equipment within the lab.** Every effort has been made to assign equipment for the personal used of each researcher (e.g. worm dissecting microsopes will not be shared). For those pieces of equipment that must be shared (e.g. confocal, gel doc, PCR machines), all surfaces, including keyboard, mouse, instrument controls, and benches will be sanitized before and after use by spraying with 70% ethanol and wiping.
10. **Shared equipment on the floor.** Every effort has been made to minimize the use of shared equipment on the floor. For equipment that must be shared (autoclaves, shakers, ice machine), surfaces will be wiped down before and after use (also see Floor Integration Plan).

Because the Kimble lab occupies the third floor of the DeLuca Labs building with several other labs, the following additional SOPs have been agreed upon and will be followed by all labs (also see Floor Integration Plan):

1. Traffic flow:
  - Hallways must accommodate bidirectional traffic. Lab personnel will minimize their use of the hallways, avoid using hallways when someone else is in the hallway, wear masks that cover the nose and mouth and maintain a 6 ft of distance from others.
2. Restrooms:
  - The 3<sup>rd</sup> floor has two restrooms. Only one person will be allowed in the restroom at any one time and 10 minutes between uses will be required to replenish the air, as possible. The interior and exterior door handles will be sanitized by spraying and wiping with 70% ethanol at least four times a day. Lab personnel will minimize their use of the restrooms, wash their hands when they are finished, and use a paper towel to exit.
3. Lunch / break rooms:
  - Lab personnel will minimize their use of the floor lunchroom by either eating at home or using lab-specific break rooms when possible. The floor lunch room is limited to two occupants at a time as per departmental guidelines, and lab-specific break rooms are limited to one occupant at a time with 10 minute vacancy between users. Surfaces touched in either room (dining table, refrigerator handle, microwave handle and controls) will be sanitized with 70% ethanol before and after use.
4. Elevators:
  - Lab personnel will minimize their use of the elevator by taking stairs, with the exception of those physically unable. Only one occupant will ride the elevator at a time, and a mask will be worn. Personnel needing to use the elevator buttons will be encouraged to press button with something other than their fingers (e.g. an object or elbow). Gloves used for lab work should not touch any surfaces in the elevator.
5. Shared equipment
  - All surfaces, including keyboard, mouse, instrument controls, and benches will be sanitized before and after use by spraying with 70% ethanol and wiping.
  - Equipment used for >1 hour (e.g. microscopes ) will be scheduled online using Google calendar.
  - High-touch surfaces such as door handles will be sanitized 4 times per day by spraying with 70% ethanol and wiping.
6. Self-monitoring for COVID-19 symptoms.
  - All Kimble lab members are expected to conduct self-monitoring each day before entering the building. Self-monitoring will follow the most recent WIDHS guidance: <https://www.dhs.wisconsin.gov/covid19/symptoms.htm> and include the symptoms listed below. Temperatures should be taken at least 30 minutes after eating, drinking or exercising and at least 6 hours after taking medications that may lower temperature ex. aspirin, acetaminophen (Tylenol), NSAIDs (ibuprofen/advil).

If self-monitoring detects symptoms, the researcher will stay home and consider contacting his/her healthcare provider if any of the following symptoms are experienced:

- Cough
- Shortness of breath
- Fever  $\geq 100.4^{\circ}\text{F}$
- Chills
- Or two or more of the following symptoms:
  - Sore throat
  - New loss of taste or smell
  - Muscle aches
  - Headache

Resource from OSHA, <https://www.osha.gov/Publications/OSHA3990.pdf>,

**Maintaining the community of the lab:**

The group meets regularly – at least once a week – via Webex to discuss lab issues of all types. The PI communicates with lab members regularly by email, phone and slack. Email, text and slack communications also occur frequently among lab members and with the PI.

**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.

- In general, the plan would conform to the steps listed above for individuals who feel ill or who experience an elevated temperature. Any researcher who feels ill will seek testing for COVID-19. Positive tests will be reported as described above.
- If several members of the lab are out sick and test positive for COVID 19, the entire lab will quarantine for two weeks after ensuring that lab freezers and equipment items are secured and ongoing experiments are halted.
- Research in the lab will resume only if (a) no other researcher develops symptoms in that two week interval, (b) no other cases have been reported on the same research floor, and (c) after disinfection of all common lab surfaces.

**o 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.

- Once suspension is announced, ongoing experiments will be halted, reagents and freezers secured. Equipment will be shut down or placed in an idle state for the period of suspension. The laboratory will be locked.
- All researchers will remain at home, except one essential person needed for minimal stock maintenance (stocks not yet frozen) and replacing the liquid Nitrogen tank required for our frozen stocks.
- Any researcher who experiences symptoms related to COVID-19 will seek testing and report the result to the PI.
- Positive COVID test results will be reported to the department chair and department PIs.

- Lab will communicate via email, Slack and Webex.

**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.

- Ongoing experiments will be halted. Reagents and freezers will be secured. Equipment will be shut down or placed in an idle state.
- The only work continued will be essential to maintain nematode stocks.
- Researchers will remain at home.
- PI continues to communicate with all lab members via email, Slack and Webex.

**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)?

- Critical reagents in the Kimble lab are in the –80 degree freezers or incubators, which are all on emergency power. None of these place the community at risk.
- All lab equipment will be shut down, except the freezers, refrigerators and incubators.
- No staff is required during a shutdown, but twice a week checks to ensure continuing freezer and incubator function are highly desirable.

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.

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