Continuity of Operations Plan (COOP) for

Margaret Clagett Dame Lab

Department of Biochemistry

(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
Margaret Clagett Dame			dame@biochem.wisc.edu
Jamie Ahrens			ahrens@biochem.wisc.edu

2. Non-essential Personnel

Name	Primary phone	Secondary phone	Email
none			

External resources

- **Bio safety contact –** Kathy Krasny, Risk Management Specialist Sr (kathy.krasney@wisc.edu; and Christina Pier, Risk Management Specialist, Sr (pier@wisc.edu). Note that our lab is approved for BSL2 work, but we currently do not have any BL2 work underway.

- **Chem safety contact –** Tilak Chandra, Chemical Safety Specialist (tilak.chandra@wisc.edu;

- **Radiation safety contact –** Peter James Seel, Health Physicist (pseel@wisc.edu

- **Animal facility (BABS) contact –** Dustin Irving dirving@wisc.edu

Biochemistry building concerns contact – Julie Kennedy jakennedy4@wisc.edu

- **Biochemistry IT contact –** Kerry Tobin kwtobin@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) Margaret Clagett Dame, dame@biochem.wisc.edu
b. Jamie Ahrens, ahrens@biochem.wisc.edu

Communication Plan

- Communication will be via email, text, and phone.
- BOX will be used for exchange of files
- Use of VPN to maintain secure access to campus IT systems and server files

Remote Data access, exchange, and security

- All data is saved on the file server and is also archived on a back-up hard drive. Files are organized according to date and year. Data that is not generated electronically is scanned and filed on the server. Lab protocols and breeding colony management are stored on the server. This allows remote access to data for telecommuting.
- Work in progress and manuscript drafts may be shared on Box. Version control will be maintained by adding the most recent generation date to the end of the file name. Once the project is complete, earlier incomplete drafts should be deleted and also archived on the server.

Research Priorities:

- The majority of our research activities involve animal studies. We have four mouse colonies containing single and double null mutant mice that have taken years to generate. These animals are not commercially available. In accordance with our RARC approved protocols, research staff is responsible for providing certain aspects of animal husbandry. In addition, research staff perform all the activities related to maintaining the breeding colonies (ear notching/genotyping/weaning/culling). J. Ahrens and M. Dame (essential personnel) have been providing care for the colonies and will continue to do so. Due to research limitations resulting from COVID-19, many offspring were culled and the size of the breeding colonies was dramatically reduced. We will begin normal breeding again to support the generation of sufficient mutant mice for animal studies to begin in the Fall 2020. Arrangements will be made as soon as it is feasible to initiate cryopreservation of sperm from the lines. The colonies will be maintained by J. Ahrens, with M. Dame providing backup care. These individuals will never be in the animal facility on the same day. In the wet lab, these individuals will not be present in the same room at any time. If one of these individuals becomes ill, the other will handle the animal care.

- Steenbock Research Fund-Vitamin A & D Studies. J. Ahrens will be present in the wet lab to process tissue samples from a whole animal radiolabeling study of a novel vitamin D analog compared to the native radiolabeled hormone, 1,25(OH)2D3. Double null mutant mice were used in this study; it is important that this work is done before metabolite degradation occurs in the stored samples. Margaret Dame will work remotely to process data generated from these experiments. Margaret Dame will be present in the wet lab for limited periods of time to process whole brain samples for subsequent analysis. These samples were generated from hypomorphic mutant mice and will deteriorate if they are not processed.

What to do if someone feels unwell?

If either Jamie Ahrens or Margaret Dame feel unwell (fever of 100.4°F (38°C) or higher or other symptoms, e.g. shortness of breath, cough) or have been in contact with somebody that is ill or tested positive for COVID-19, they will contact the other individual immediately via phone or text and will not come to the lab. M. Dame will communicate with the floor leader (R. Amasino) and biochemistry administration and will follow campus policies and guidance document recommendations. The PI and lab member will review the CDC and campus policies related to temperature monitoring and to monitor their temperature and other wellness indicators on a daily basis.

If the PI or J. Ahrens feel unwell or live with someone that feels unwell, they will self-isolate. If the symptoms last longer than one day, they 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 per videoconferencing.
- Heightened communications - Buddy system in place for animal work. Look for text and email messages from PI

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

General SOPs for Minimizing community spread:

Researchers will review the following UW-Madison guidelines and recommendations 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. A maximum of 2 persons from the essential personnel list will be in the building. There will be no more than 1 person per 350 square feet of research space, and 6 feet of physical distancing will be allowed for personnel moving within research spaces.
- Other lab requirements for use of personal protective equipment within the worksite is already specified in the lab Biological Safety, Chemical Safety, Radiation Safety, and RARC approved protocols and will be continued.

General SOPs for Minimizing community spread:

Current SOPs in the lab require daily surface sanitization of work spaces and high touch areas 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.
2. The following density will be maintained:
    a. Biochem Labs 245 (735 sq ft: maximum occupancy 1 person)
    b. Biochem Labs 249 (502 sq ft: maximum occupancy 1 person)
3. *Only healthy personnel,* regardless of the level of symptoms, *are allowed to enter the lab spaces*. Avoid contact with people who are sick.

4. *Upon entering any laboratory space, personnel must wash hands immediately* and before touching any surfaces. Use hand sanitizer when hand-washing facilities are unavailable. Avoid touching your eyes, nose or mouth with unwashed hands. Cover your coughts and sneezes.
5. *Working surfaces will be sterilized* with 70% Ethanol *prior to assuming work and at completion of work*.
6. *A mask MUST be worn if you approach within 6 feet of another person or in any room in which two individuals are present at the same time.*
7. *In-person communication will use at least 6 feet distancing, however, it will be replaced whenever possible via the use of phone, text, or email.*

Maintaining the community of the lab:

Margaret Clagett Dame (PI) and Jamie Ahrens discuss lab related information by phone, text and email on a regular basis.

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 Dame lab (rooms 245 and 249) consists of lab spaces of 736 and 502 sq ft, respectively. There will only be one researcher at a time present in each of these rooms. Several additional small rooms house equipment (room 247, 250); these will have only 1 occupant at time, with 20 min allowed for air exchange before another person enters the room. We share equipment in an additional lab (room 255, 569 sq ft) with the DeLuca group. Our groups will ensure single occupancy of the room by establishing a room schedule and by hanging a sign on the outside door of room 255 (occupied/unoccuped). When the room is in use, the sign will read "occupied" and "not occupied" if no one is in the room. All work will be conducted during normal business hours.

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.

- If either Jamie Ahrens or Margaret Dame become sick, the other person will take over essential animal care functions. If both become ill, then Lori Plum in the DeLuca lab (laplum@wisc.edu) will take over essential animal care functions.
- For wet bench work in progress, a copy of the protocol (hard copy on the lab bench) and an electronic copy on the server will be accessible to the other individual with notation of progress so that the other individual could pick up and complete any critical steps. Stopping points should be noted so that samples can be preserved, and the experiment can be paused.

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.

- This is the situation that we are currently in. Research was suspended and only essential functions (care of our 4 breeding colonies - feeding, breeding, ear notching, genotyping, and culling by research staff) continued.

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.

- All wet-bench research except that related to animal care and maintenance of the breeding colony will cease. J. Ahrens will continue to assume primary responsibility for the animal colonies with M. Dame serving as backup.
- Both J. Ahrens and M. Dame have been trained on cage changing, material washing and use of the autoclave in the animal facility.
- All -80 freezers will be checked to ensure alarms are engaged. All are also connected to the University alert system. Biochemistry building personnel will monitor freezers, refrigerators, and cold rooms storing research materials.
- All instruments will be checked to insure they are turned off. Gas valves and cylinders will be checked to verify they are closed.
- M. Dame and Department staff will do a walk through to be certain that everything is properly taken care of.
- Proper storage of chemicals will be checked.

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)?

- J. Ahrens will continue assume primary responsibility for the animal colonies with M. Dame serving as backup.

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.

- Margaret Dame: dame@biochem.wisc.edu
- Jamie Ahrens: ahrens@biochem.wisc.edu