Continuity of Operations Plan (COOP) for
Holden 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

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
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<tbody>
<tr>
<td>James Thoden</td>
<td><a href="mailto:jbthoden@wisc.edu">jbthoden@wisc.edu</a></td>
</tr>
<tr>
<td>Hazel Holden</td>
<td><a href="mailto:hmholden@wisc.edu">hmholden@wisc.edu</a></td>
</tr>
<tr>
<td>William Griffiths</td>
<td><a href="mailto:wagriffiths@wisc.edu">wagriffiths@wisc.edu</a></td>
</tr>
<tr>
<td>(undergraduate</td>
<td></td>
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<tr>
<td>researcher)</td>
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</tr>
<tr>
<td>Chase Seltzner</td>
<td><a href="mailto:seltzner@wisc.edu">seltzner@wisc.edu</a></td>
</tr>
<tr>
<td>(undergraduate</td>
<td></td>
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<tr>
<td>researcher)</td>
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<tr>
<td><strong>Noah Herkert</strong></td>
<td><a href="mailto:nrherkert@wisc.edu">nrherkert@wisc.edu</a></td>
</tr>
<tr>
<td>(undergraduate</td>
<td></td>
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<tr>
<td>researcher)</td>
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<tr>
<td><strong>Zuhad Ansar</strong></td>
<td><a href="mailto:zansari@wisc.edu">zansari@wisc.edu</a></td>
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<tr>
<td>(undergraduate</td>
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<tr>
<td>researcher)</td>
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<tr>
<td><strong>Colton Heisdorf</strong></td>
<td><a href="mailto:cheisdorf@wisc.edu">cheisdorf@wisc.edu</a></td>
</tr>
<tr>
<td>(undergraduate</td>
<td></td>
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<tr>
<td>researcher)</td>
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New additions to COOP are highlighted in green.
2. Non-essential Personnel

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External resources

• **Bio safety contact** – Kathy Krasny, kathy.krasny@wisc.edu,

• **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) Hazel Holden, hazel_holden@biochem.wisc.edu,
b. James Thoden, jbhoden@wisc.edu

Communication Plan

The laboratory uses Teams meetings, texting, and email to communicate every week and daily where needed.

Lab members also communicate via email and the phone numbers listed above.

Remote Data access, exchange, and security

All users will collect data on appropriate laboratory instruments or other computers. Researcher computers are backed up in Box or OneDrive accounts that provide both local and remote access. Files related to active projects and group presentations are shared via the Files feature of Microsoft Teams. Raw and analyzed data will be shared among project participants to ensure a viable transition of the project to another researcher if needed.

**Research Priorities:**

To continue my research on the structures and functions of enzymes involved in the biosynthesis of unusual sugars found attached to the lipopolysaccharides of pathogenic organisms. This work is funded by an NIH MIRA award that started this past January and will continue for five years.

**What to do if someone feels unwell?**
Researchers will be asked to review campus policies related to temperature taking and monitor their temperatures on days they are planning to work on-site. Researchers will notify the PI if they have a fever of 100.4°F (38°C) or higher or other symptoms (e.g. shortness of breath, cough), and stay home. Researchers that feel unwell or have family members 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.

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. Look for text and email messages from PI

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

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](https://covid19.wisc.edu)
- UW Madison guidance on face coverings: [https://facilities.fpm.wisc.edu/returning-to-campus-safely/](https://facilities.fpm.wisc.edu/returning-to-campus-safely/)
- OVCRGE guidelines on phased resumption of research: [url here when published>]
- Recommendations to bring labs back on-line: [https://d1cjb8q1w2lz797.cloudfront.net/wp-content/uploads/sites/22/2020/05/EHS-ADM-GUI-002.pdf](https://d1cjb8q1w2lz797.cloudfront.net/wp-content/uploads/sites/22/2020/05/EHS-ADM-GUI-002.pdf).
- This COOP plan, which will be distributed to all researchers on our Teams site.
- The research floor COOP, which will be distributed to all researchers on our Teams site.

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 excellent hygiene practice including constant, thorough hand washing and covering of coughs and
sneezes. 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/

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:

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- OVCRGE guidelines on phased resumption of research: <<url here when published>>
- 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, which will be distributed to all researchers on our Teams site.
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Maintaining the community of the lab:

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, so lab space will be consistently cleaned in an ongoing manner and samples stored at the end of each day.

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.

- Participating researchers will have reviewed the campus guidance listed above under “OVCRGE guidelines on phased resumption of research” and “Recommendations to bring labs back on-line”

The Holden lab has 3500 sq ft of lab space, so requests maximum occupancy of 4 researchers at any time. This space is shared with Dr. Rayment. The space has a cold room and centrifuge room that are located in the middle of the laboratory with the active space for the Rayment lab at the Western end whereas the Holden lab is located at the Eastern end. With this configuration it will be easy to maintain social distance and only allow one investigator in each area at any given time. Use of the centrifuges and cold room will be coordinated by email and phone calls. It is visually easy to observe if anyone is occupying common work areas.

The number of people in the lab at any given time will be maintained below the 350 sq ft per person guideline provide by campus to allow planned access for collaborators. Our plan is to provide researchers sufficient time to complete experiments, and then work remotely to analyze their results. We expect that several researchers will be in the lab all day. Researchers will be able to define preference for shift work or work on days of the weekend. Our highest priorities for new research after the reopening are the following:

- James Thoden requests on-site permission to complete experiments needed to maintain our research priorities and obtain the preliminary data required to support a grant submission. Jim requests 40 hours per week of laboratory access. He typically starts work around 7:00 am and leaves late afternoon depending on the state of his experiments.
- William Griffiths (undergraduate researcher) requests on-site permission to complete experiments needed to maintain our research priorities and obtain the preliminary data required to support a grant submission. William ~12 hours per week of laboratory access.
- Chase Seltzner (undergraduate researcher) requests on-site permission to complete experiments needed to maintain our research priorities and obtain the preliminary data required to support a grant submission. Chase requests ~12 hours per week of laboratory access.
- Noah Herkert (undergraduate researcher) requests on-site permission to complete senior research experiments which in turn are experiments needed to maintain our research priorities and obtain the preliminary data required to support a grant submission. Noah requests ~12 hours per week of laboratory access.
- Zuhad Ansari (undergraduate researcher) requests on-site permission to complete senior research experiments which in turn are experiments needed to maintain our research priorities and obtain the preliminary data required to support a grant submission. Zuhad requests ~10 hours per week of laboratory access.
Colton Heisdorf (undergraduate researcher) requests on-site permission to complete senior research experiments which in turn are experiments needed to maintain our research priorities and obtain the preliminary data required to support a grant submission. Colton requests ~10 hours per week of laboratory access.

Approximate lab usage for the undergraduate researchers is scheduled as follows:

<table>
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<tr>
<td>8:50</td>
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**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 in a manner that allows an orderly shutdown. Samples will be stored and computer and instruments that do not have an anticipated need in the next 24-72 hours will be shut down.

**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 fridges and freezers where samples are stored. The X-ray data collection facility will be powered down to allow for an orderly resumption of research activity.

**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.

**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.

a. The lab does not require staffing to avoid risk or harm. Biochemistry building personnel will monitor freezers and fridges storing research materials. Emergency contact for the lab is either Jim Thoden, James Thoden, jbthoden@wisc.edu or Amanda Drennan, drennan@wisc.edu,