Synovec Lab Plan for In-Person Research

Lab spaces covered: CHL 121, 140, 142
Office spaces covered: CHL 115, 113, 109, 137, 140A

COVID-19 Supervisor and Personnel

Social and Physical Distancing

Responding to Illness

Cleaning and Disinfecting Your Workplace

Encouraging Good Hygiene

General

*** Personal safety is this lab’s highest priority, and all group members have been informed that all in-person research is completely voluntary at this time. Alternative at-home work will be provided for those who do not feel safe coming to the lab space. Anyone who plans on coming to the lab space has been informed and required that time in the building must be kept to a minimum.

COVID-19 Supervisor and Personnel

Principal Investigator:
Robert E Synovec  res9@uw.edu  206-685-2328

A member of the group that can assume the COVID-19 Supervisor role in the PI’s absence:
Paige Sudol  paiges8@uw.edu  443-535-5783

Names of people conducting in-person research:
Social and Physical Distancing

1. Attach lab floor plan. Label all the room(s)/work area(s) and for each room/work area indicate the maximum occupancy.

   **CHL First Floor**
   
   Office spaces 1, 2, 3, 4 and 5 (CHL 137, 140A, 115, 113, and 109) will each be used as discrete work areas with a maximum occupancy of one.

   Lab spaces (CHL 142, 140, and 121) will be used with a maximum occupancy of 2. Usage of one lab space by 2 personnel will require that both lab members follow the “good hygiene” guidelines as described in section 10, namely that both lab members wear masks, follow cleaning and disinfecting requirements, and abide by the social distancing requirement of being at least 6 feet apart from each other. Additionally, total occupancy of our lab spaces will be limited to no more than 2 (total, for all three spaces combined) at any one time for the first two weeks of operation in order to make sure we do not overwhelm the new system.

2. Describe a lab usage scheduling plan that will minimize the number of people in the lab at any given time and how it will be implemented:

   The PI will communicate a scheduling plan for each week to Paige Sudol, and she will then communicate all scheduling to other group members using Slack. The weekly schedule of who will occupy which lab space at what times will be made and distributed to all group members no later than the Sunday evening before the week starts. Any revisions to a weekly schedule during a given week will require PI approval.
Each lab area will be primarily occupied by one person. However, a maximum of one additional lab member may access the same lab space on a temporary basis to fetch equipment, supplies, observe research or aid the primary lab user. Lab members who are accessing a work area primarily used by another person must wear a face cover at all times, follow cleaning and disinfecting requirements, and maintain a minimum distance of 6 feet from the primary person.

3. Describe specific rules and policies that will be implemented in your group to ensure social and physical distancing measures:

Before arrival
- Complete the COVID-19 Symptom Attestation on Workday, as described in Section 7.

On arrival:
- Lab members must enter CHL on the first floor only to minimize interaction with personnel from other labs.
- Lab members must wear face masks upon entry to the building and immediately wash hands before beginning lab or office work.
- Lab members must communicate their entry using the lab Slack channel.

While on campus:
- Lab members should stay at least 6 feet apart from each other.
- When temporarily occupying the same office or lab space as another group member, both group members must wear a face mask. The use of a mask does not replace social distancing guidelines – group members must always be at least 6 feet apart from each other, as well as others not in our group (i.e., in the hallways near the labs and offices).
- When occupying a lab space, a lab member will post a sign on the door stating “Occupied” so that other lab members know to enter with caution.
- Before entering a room, lab members must verbally announce their entry.
- Lab members must wear a mask when performing any lab work.
- Lab members must not wear headphones or earbuds covering both ears while working in a lab space. Group members may wear headphones or earbuds in office spaces.
- Food consumption must be kept to a minimum in office spaces.

When leaving campus:
- Lab members must exit CHL on the first floor only to minimize interaction with personnel from other labs.
● Lab members must wear face masks when exiting the workspaces and the building.
● Lab members must announce their exit via the lab Slack channel.

To minimize the interaction with spaces and people outside of the lab, all items from the stockroom will be picked up only by persons who are performing lab work at that time. Those who have received shipments from the stockroom should contact those currently working in the lab for pickup.

4. Describe the tasks and activities that can be safely performed in the lab spaces:

The following tasks can be safely performed in the lab in accordance with social distancing guidelines:
● Instrument maintenance, where one lab member is changing columns, tightening nuts, etc., while the other lab member is operating the instrument computer (which are all at least 6 feet away from where instrument maintenance would take place).
● Only one lab member operating the instrument computer, with another lab member on the opposite side of the room or in an adjoining room working on another instrument.
● Sample preparation (i.e. SPME extraction, metabolite derivatization) can be safely performed as usual with both lab members maintaining at least 6 feet between each other in Lab #2.
● One lab member carting a gas tank into a lab space while another lab member guides them from at least 6 feet away.

The following tasks cannot be safely performed in the lab at this time:
● Two lab members doing instrument maintenance on the same instrument at the same time.
● Two lab members changing a gas tank at the same time (i.e. two lab members mounting a gas tank to the wall is unnecessary and violates social distancing guidelines).
● One lab member changing a gas tank without anyone else in the lab/office spaces – another lab member must be present nearby in case assistance is needed. If so, that assistance will be provided concurrent with following social distancing.

5. Describe the changes to the workspace(s) that have been made to ensure social and physical distancing and hygiene requirements:

Office spaces have been reorganized such that no more than one person occupies the same office.
A surplus of paper towels and hand soap will be placed at each sink (Labs #1, #2) to ensure proper hygiene upon room entry and exit. Additionally, Clorox disinfectant wipes will be provided in all office and lab spaces. The EPA has stated that Clorox disinfecting wipes are strong enough to kill COVID-19. A list of suitable alternative disinfectants can be found at the following link:
https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2

6. Describe how policies and measures have been communicated to group members (signage posted, e-mails, group meetings, etc):

Policies and measures have been discussed:
- At a virtual group meeting.
- Via distribution of this document.
- Signs posted on the entrance to each work area designated above.

7. Describe how new members of your group will be trained. Please specify any training that can and should be done remotely, such as training for specific instruments, equipment, or software.

**General Training Steps**

- **Incoming students** will be required to complete the virtual EH&S safety module on using gas cylinders before arriving for in-person training.
  - In-person training for exchanging GC consumables (gas cylinders and liquid nitrogen tanks) will be carried out with a minimum of two group members while maintaining a minimum distance of 6 ft apart to ensure safety throughout cylinder and tank transport and hookup. All members will be wearing masks during this process.
- **Instructional videos and documentation** on common laboratory practices (i.e., extraction techniques, fume hood operation, etc.) will be provided to new students on the group’s shared drive for remote access.
- **Documentation regarding instrumental setup, maintenance, and troubleshooting** will be made available on the group’s shared drive for students to access remotely.
- **Training incoming graduate students on operating all GC instruments** will entail a combination of remote and in-person training, and completion of remote training will be required before in-person training can commence. In-person training will be performed by a senior group member with all participants maintaining a minimum distance of 6 ft apart and wearing properly fitting face masks and standard PPE.
- **Several in-house Powerpoint tutorials on instrument maintenance** will be provided to incoming students, which include images and step-by-step instructions for the following procedures:
  - Trimming and measuring capillary GC columns
- Changing the filaments in the TOFMS
- Installing columns in the inlet, thermal modulator, and TOFMS detector
- Method optimization
- Changing the liquid nitrogen (LN2) tank and other carrier gas cylinders

- Training on all software for data analysis will be performed remotely through virtual meetings and online tutorials.

- Before performing sample preparation, new group members will confirm with a senior group member via virtual meeting or socially distant office visits (maintaining a minimum of 6 ft apart) that they have a plan in place to handle the safety aspects, chemical disposal, sample storage, etc.

- When performing experiments, senior group members will be present in nearby office or lab spaces to answer questions or available for virtual meetings.

- Interpretation of experimental results and non-emergency troubleshooting will be performed online with senior group members and/or the PI if available.

- Incoming students will not perform hazardous experiments that would normally necessitate the presence of a second researcher in the immediate vicinity. The hazardous part of such experiments will be performed by a senior researcher instead.

- In case of emergency, the second researcher will approach wearing standard PPE equipment, including face mask (personal or provided by the department).

**CHL 142 (Lab #1)**

- CHL 142 contains two instruments:
  - Agilent 7890 GC-FID and Agilent Intuvo 9000 GC-FID
- New group members can be trained and approved on these instruments either by training on the instruments in this laboratory, or any other GC-FID instrument in the other lab spaces.
- New instrument training will be done one instrument at a time. That is, when training a new lab member on one instrument in CHL 142, the other instrument must not be in use.
- The Intuvo 9000 is equipped with in-depth tutorials on how to replace and operate each part of the instrument making social distance training simple. Any new trainee can simply follow the instructions put forth by the instrument itself to familiarize themselves with its operation while supervised by a senior researcher from 6 or more ft apart.
- Training for the *openlab* operating system used to control the Intuvo remotely from a computer console can be done remotely and does not require in lab training

**CHL 140 (Lab #2)**

- CHL 140 contains three instruments:
  - LECO 4B BT GC×GC-TOFMS, Agilent GC-qMS, and Agilent GC×GC-FID
• Once new researchers have completed virtual and in-person training on the Agilent GC-qMS and GC×GC-FID, they will be allowed to independently perform experiments after confirmation of plans with a senior group member. They must wear properly fitting face masks and standard chemical PPE while operating these instruments.

• Once new researchers have been trained on the LECO 4D BT, experiments will be performed under the supervision of a senior group member. Appropriate physical distancing measures will be applied with the two persons maintaining a minimum of 6 ft apart while wearing properly fitting face masks. Standard chemical PPE will also be worn.

CHL 121 (Lab #3)

• CHL 140 contains one instrument:
  ○ Pegasus 4D GC x GC-TOFMS

• The following in-house documents Pegasus 4D GC x GC-TOFMS instrument maintenance will be provided to incoming students, which include images and step-by-step instructions for the following procedures, for remote access:
  ○ Venting and pumping down the Pegasus 4D GC x GC-TOFMS instrument
  ○ Recently published literature on operation of the pulse flow valve modulator will be made available to students

• A senior graduate student will provide in-person training, in the form of having students observe and/or participate in the current data collection campaign at a safe distance and wearing masks.

• Operation of the Pegasus 4D GC×GC-TOFMS must be conducted in the presence of a senior graduate student until solo operation can be successfully demonstrated.

Responding to Illness

1. Describe how the University of Washington requirements for symptom assessment and attestation will be fulfilled:

Perform a self-check of wellness: Bring awareness to your body and assess if any symptoms of COVID-19 infection are present. If you are experiencing symptoms then (i) remain at home and do not go to campus, even if the symptoms are mild and (ii) contact your healthcare provider.

DO NOT come to lab if you are feeling any potential symptoms of COVID-19, including:

- A new fever (100.4 F or higher) or a sense of having a fever?
- A new cough that you cannot attribute to another health condition?
- New shortness of breath that you cannot attribute to another health condition?
- A new soar throat that you cannot attribute to another health condition?
- New muscle aches that you cannot attribute to another health condition or that may have been caused by a specific activity, such as physical exercise?
● New respiratory symptoms, such as sore throat, runny nose/nasal congestion or sneezing, that you cannot attribute to another health condition?
● New chills or repeated shaking with chills that you cannot attribute to another health condition?
● New loss of taste or smell that you cannot attribute to another health condition?

Each day that you plan to access in-person resources of the lab, you must complete the COVID-19 Symptom Attestation on Workday (https://isc.uw.edu/) prior to coming to campus.

2. Describe the plan in case someone in the group develops COVID-19 symptoms (the plan should be consistent with the university developed recommendations found at https://www.washington.edu/coronavirus/faq/):

● If at work, they must immediately go home and contact their healthcare provider. If at home, they are instructed to contact their health provider. They are instructed to consult https://www.washington.edu/coronavirus/faq/ for the course of action recommended by the University of Washington in the case of the suspected case of COVID-19.
● In case a group member tests positive for COVID-19 or their healthcare provider suspects a case of COVID-19, they are instructed to immediately contact EH&S Employee Health Center at 206-685-1026 or emphlth@uw.edu.
● It is also suggested to members of the group, that if they feel comfortable with sharing the information, they could contact their PI and/or Paul Miller (paulmil@uw.edu) (206) 543-1612.

Cleaning and Disinfecting Your Workplace

1. Describe cleaning and disinfection protocols for high-touch surfaces, shared equipment, and common areas in the lab, including who is responsible:

To reduce any risk of exposure, every individual who uses a work area is required to disinfect surfaces both before and after each shift.

● Wash hands thoroughly for at least 20 seconds using soap.
● Disinfect all surfaces you intend to use or might use, including cabinet and drawer handles and doorknobs.
● After usage, disinfect all lab surfaces: namely, keyboards, instrument keys, and desk surfaces.

When lab members access other work areas on a temporary basis, e.g., to fetch equipment or supplies, that lab member is responsible for the following:

● Wash hands thoroughly for at least 20 seconds using soap immediately prior to accessing the work area.
● Wash hands thoroughly for at least 20 seconds using soap immediately after accessing the work area.
Encouraging Good Hygiene

1. Describe measures in your group that will promote and enable uniformly good hygiene practices:

   Practice good general hygiene, including frequent handwashing, washing cloth masks in hot water after each use, and wear freshly laundered clothing.

   Immediately upon (1) entering CHL and (2) entering any office or lab space, group members must wash their hands using the sinks in CHL 121 or CHL 140. Hands must be washed thoroughly after touching door handles, light switches, or other high-touch surfaces (phones, white boards, etc.).

2. Describe the lab policy for wearing a mask and other protective equipment:

   The CDC recommends, at a minimum, a cloth face covering or a personal mask if there is a potential to (even temporarily) come within 6 feet of another person. A cloth mask is required in all shared spaces in the CHL (hallways, bathrooms, etc.) and in all office and lab areas when more than one lab member is in the room. A cloth mask is required when performing any lab work, even if only one person is in the lab space. A cloth mask is also required when entering or exiting the building.

   Before putting a mask on, taking it off, or adjusting it, take the gloves off and wash your hands with soap and water.

   Normal PPE rules still apply. Do not touch door handles with a gloved hand. You risk contaminating the door handle with chemicals/biohazards and your glove will be contaminated with germs from the door handle.

General

1. Provide a plan for training group members in COVID-19-related policies and procedures described in this document, including how the training will be documented:

   All lab members included in the “Names of people conducting in-person research” list will be required to attend a lab-specific training on our plan for in-person research. All lab members will receive an electronic copy of this plan prior to the meeting. Lab members will be required to certify that they have read, understood, and intend to comply with both this lab policy and
the Departmental policy. A form will be distributed via email to group members so they can provide their signature to fulfill this certification requirement. Copies of these signed forms will be kept in the group lab safety manual and on the group share drive and will also be sent to department administrators.

2. Describe the plan for visitors. The plan should address symptom monitoring, attestation, and visitor log maintenance for all the visitors. (Visitors are defined as those who do not normally use these spaces, including both UW and non-UW personnel):

Visitors will only be permitted for the sake of promoting lab safety and hygiene (i.e. emergency access and waste collection). We will post signs on all of our lab/office doors stating the following:

“All visitors (UW and non-UW personnel) – contact Paige Sudol at 443-535-5783 upon arrival. Only visitors with face masks will be permitted in these spaces. Paige will meet you in the hallway of the first floor of CHL (just outside CHL 115) so you can (1) sign a visitor log and (2) complete a form attesting that you have no COVID-19 symptoms. The form will be provided while maintaining a minimum distance of 6 feet apart.”

This visitor form (attestation of no COVID-19 symptoms) can be found on the last page of this document.

3. Describe how group members will be informed of COVID-19-related policies for shared facilities and common spaces in the department:

All group members will be provided with a digital copy of any guidelines developed by the department. Group members must acknowledge receipt of the guidelines by signing a form that will be sent via email (see bullet point 11 above).

4. Describe any other COVID-19 related policies implemented in your group:

n/a
Department of Chemistry Visitor COVID-19 Symptom Attestation for Working On-Site

Since your last day of work, or since your last visit to a University facility, have you experienced any of the following symptoms:

- A new fever (100.4 F or higher) or a sense of having a fever?
- A new cough that you cannot attribute to another health condition?
- New shortness of breath that you cannot attribute to another health condition?
- A new sore throat that you cannot attribute to another health condition?
- New muscle aches that you cannot attribute to another health condition or that may have been caused by a specific activity, such as physical exercise?
- New respiratory symptoms, such as sore throat, runny nose/nasal congestion or sneezing, that you cannot attribute to another health condition?
- New chills or repeated shaking with chills that you cannot attribute to another health condition?
- New loss of taste or smell that you cannot attribute to another health condition?

If you are sick or have one or more of the above symptoms:

- You must stay home or leave the UW facility at which you are working.
- Follow your department’s procedure for calling out sick or requesting to work from home.
- Contact your health care provider for medical guidance.

I attest that prior to coming onsite on today’s date that I do not have any of the above symptoms.

☐ I have read and agree to the above statement.

☐ I attest that I do not have any of the above symptoms.

Visitor location:

Date:

Signature: