Phase 2 Resumption of Chemistry Research Operations: Group Protocols

In effect June 1st, 2020 and until further notice
Last updated: July 31, 2020

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Alexanian Group

Alexanian Group Phase 2 Resumption of Research Operations

Last updated: May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

8 graduate students	Tim Fazekas, Ashley Zachmann, Alex Veatch, Hannah Shenouda, Austin Miller, Hannah Lankswert, Michelle Townsend, Quentin Tercenio
2 undergraduate researchers	Vahagn Giuilmian, Maia Vierengel (once allowed to return)

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  Work schedules will be staggered between morning/afternoon shifts (approximately 8am-2pm, 2:30pm-8:30pm). As indicated by the attached lab plan, workers will coordinate with lab members with overlapping 200 square foot work areas (i.e., Ashley and Michelle, Hannah L and Alex) to ensure non-overlapping work schedules, and so that 50% or less of these lab members are present at any one time. Overlapping areas will be defined by hood-space, as most hands-on work will be done at fume hoods; computer-based work (signals pages for experiments, reading papers, etc.) should be completed before coming into work when possible. *In no case will two workers occupy adjacent desks during the day*.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  A problem area would be at rotovaps, across the hall in Venable 2305 - minimizing time spent standing at rotovaps (less than a minute) and wearing face coverings at all times will maximize effective social distancing; sanitization with alcohol-based cleaners after use will additionally minimize risk. Furthermore, only one person will be in the room at a time.

- Indicate the maximum occupancy for each room associated with your research program.

  2302- 2
  2306-2
  2310-1
  2314- 1

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Indicated in the plan are effective work areas for each member of lab - assuming nearly all work will be done at fume hoods. Therefore, special care should be taken to make sure only one of these two people are present in lab at a time by staggering work schedules, by coordination with one's adjacent hood-mate.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

  Isopropanol or 70% ethanol squirt bottles will be used at the beginning of work shift, throughout the day (roughly once per hour), and at the end of shifts to sanitize work areas as well as door handles, other frequently touched surfaces

- What is your protocol for sanitizing equipment?

  Isopropanol or 70% ethanol squirt bottles and Kimwipes will be used to sanitize equipment used

- When will personnel wash and sanitize their hands while in lab?

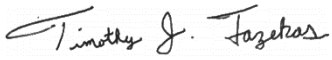
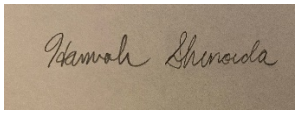
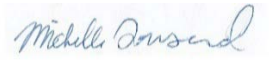
  Before/after gloves are put on, hands should be sanitized. Hands will be washed hourly. Eating should be minimized in lab, but should the need arise thorough hand washing before/after eating/drinking should minimize potential exposure.

- What is your policy for wearing masks in lab?

  Masks should be worn ***at all times*** while working in lab

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Timothy Fazekas		5/26/20
Quentin Tercenio		5/26/20
Ashley Zachmann		5/26/20
Alexander Veatch		5/26/20
Hannah Lankswert		5/27/20
Hannah Shenouda		5/27/20
Michelle Townsend		5/27/20
Austin Miller		5/27/20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Erik Alexanian.		5/27/20

Atkin Group

Atkin Group Phase 2 Resumption of Research Operations

Last updated: May 25, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	5
# of postdocs	0
# of visiting scientists	0
# of undergraduate researchers	3

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

Three students will keep working from home for now.

Worker attendance logged on jibble, a slack app for time-keeping, on arrival and leaving so others know who is in the lab (two students).

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

Given the space in the lab and layout of instruments, this should not be an issue. Personnel will also wear masks in the lab.

- Indicate the maximum occupancy for each room associated with your research program.

2 people in Caudill 107 and 109, one person in 010.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

3 times/day, on arrival, before leaving, and before lunch/break.

- What is your protocol for sanitizing equipment?

Clean gloves for handling tips and samples in atomic force microscope

Covers for keyboards/mice cleaned after use, as well as surrounding surfaces. Any other equipment (e.g. soldering station, working microscope) will be cleaned after use with isopropyl alcohol.

- When will personnel wash and sanitize their hands while in lab?

On entrance, before exit; before putting on gloves and after removing; and every hour.

What is your policy for wearing masks in lab?

Students will wear a mask at all times while in lab and on campus.

A

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Chiung-Wei Huang	Chiung-Wei Huang	5/29/2020
Clayton Casper		05/28/2020
Taehyun Lee	DocuSigned by: Taehyun Lee 9BC6A92F3F07462...	5/29/2020
Earl Ritchie	DocuSigned by: Earl Ritchie 4EA34A465E264FF...	5/29/2020
Will Conrad	DocuSigned by: CE3D6FE23A31446...	5/29/2020
Noah Cabanas	DocuSigned by: NOAH CABANAS 123AE0D56E3944E...	5/29/2020

By signing below, the Principal Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Joanna Atkin	DocuSigned by: Joanna Atkin 2584B7B22AFD476...	5/29/2020

Cahoon Group

James Cahoon Group Phase 2 Resumption of Research Operations

Updated: May 29, 2020
Updated: June 1, 2020 (changes highlighted in yellow)
Updated: June 2, 2020 (changes highlighted in green)

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	8
# of postdocs	0
# of visiting scientists	0
# of undergraduate researchers	3 (but 0 in lab)

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
    - Two-day shifts with 4 personnel each plus flex days when people can sign up to work
        - M/T: Aaron, Corban, Kelly, Jon
        - W/Th: Sam, Taylor, Jon, Flex
        - F/Sat: Lorenzo, Jon, Flex, Flex
        - Sun: Flex, Flex, Flex, Flex
    - Daily attendance must be logged using the shared Google calendar (add/delete your name from the day to correspond with your attendance)
    - Sign up for Flex days must be done through the shared Google calendar by adding your name to the day. No single day can exceed four names.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
    - In Caudill 134:
        - Install plexiglass parallel to benchtops in Caudill 134 to more effectively divide two halves of room
        - On the CVD system side, users will communicate so that only one person is in the room at the same time
    - Other potentially tight areas in which users will communicate usage:
        - Microscope/UV-Ozone/RTA: only one user at a time
        - Centrifuge/Glovebox: only one user at a time

- Indicate the maximum occupancy for each room associated with your research program.
    - Caudill 024: 2
    - Caudill 025: 2
    - Caudill 134: 2

- Caudill 008: 2

- Attach a floor plan with demarcated areas (200 sq ft) for guiding social distancing.
  - See end of document

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
  - All common-use surfaces (door handles, light switches, countertops, keyboards and mice) will be sanitized at beginning and end of the work day by first person in and last person out
  - All common surfaces will also be sanitized at approximately 11 am and 2 pm
  - Other surfaces will be sanitized before and after every use
    - Microscope (knobs, keyboard, mouse, eyepieces)
    - CVD computer, hood sash, and common touch surfaces
    - Glovebox gloves: wipe down
- What is your protocol for sanitizing equipment?
  - Spray 70% isopropanol onto paper towel and wipe down interactive surfaces
  - Use chlorox or similar wipes
- When will personnel wash and sanitize their hands while in lab?
  - Wash your hands before entering the lab
  - Wash hands before re-entering the office
  - Wash hands/use hand sanitizer before touching surfaces without gloves
  - Wash hands at minimum once every hour
- What is your policy for wearing masks in lab?
  - All personnel will wear masks at all times except in dedicated single-person offices (Prof. Cahoon's office Caudill 019 and Jon Meyer's office Caudill 022)
- Other prevention practices:
  - Permanently designated eyeglasses
  - Permanently designated lab coats

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name Signature Date

Jon Meyers

Jimmy Custer

Taylor Teitsworth

Aaron Taggart

Lorenzo Serafin

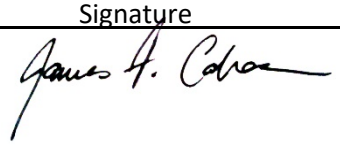
Corban Murphey

Kelly Beardslee

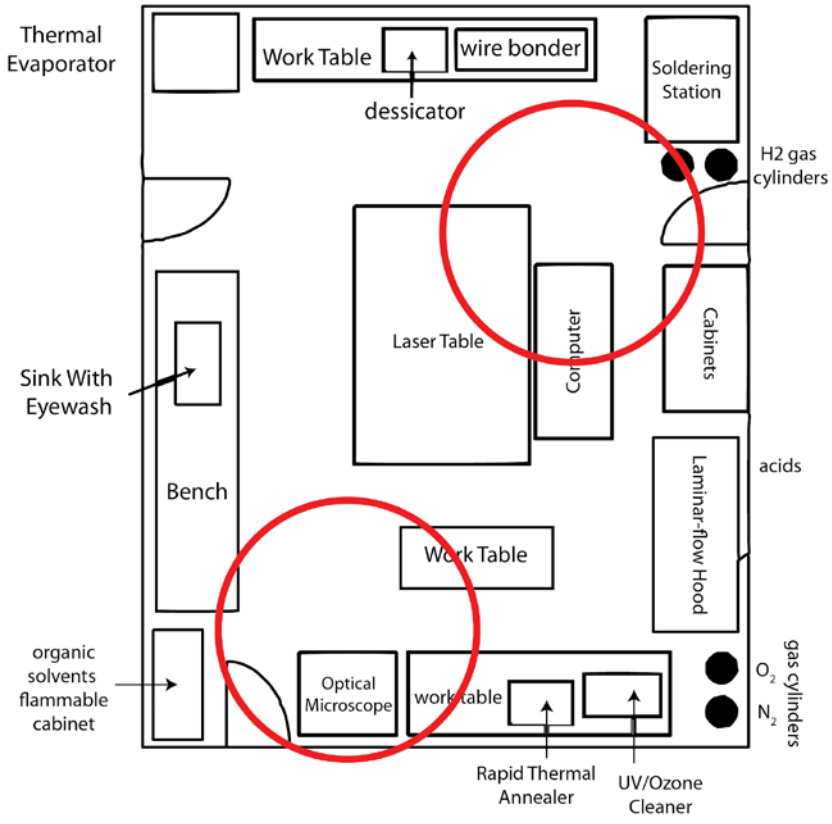
Sam Litvin

My students generally do not have printers or scanners at home, so I took their agreement to this plan by a show of hands on 5/28. - Jim

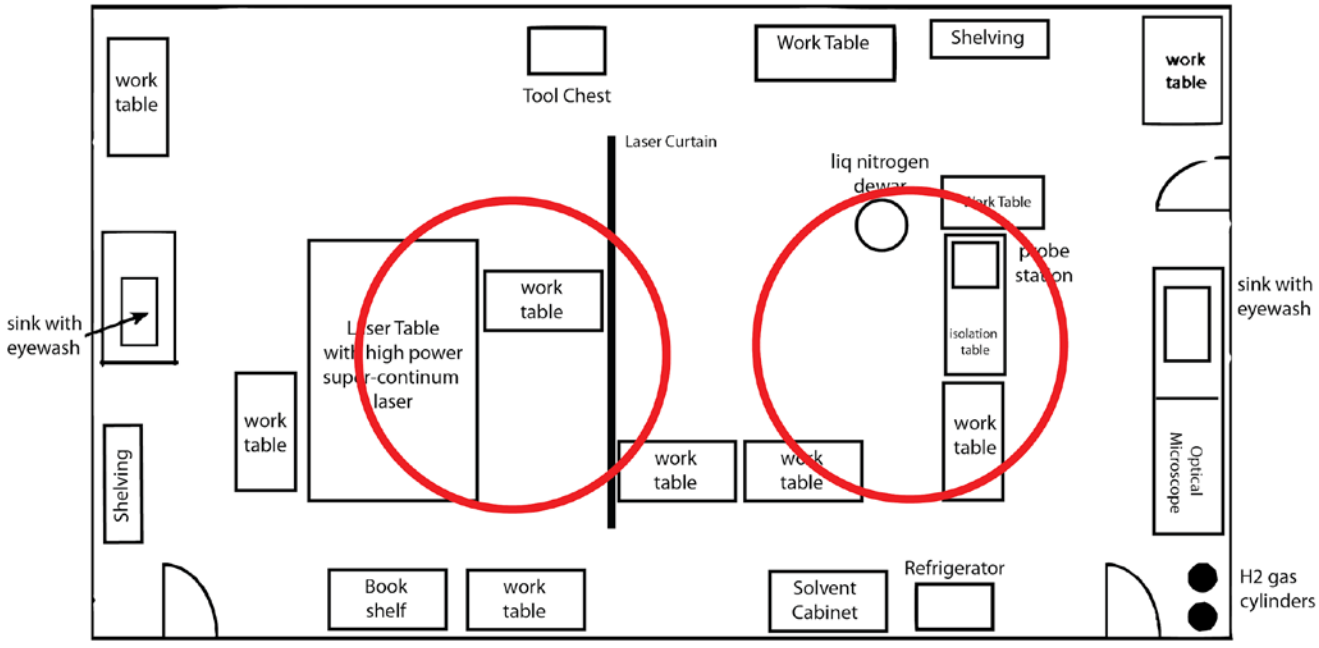
By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
James Cahoon		05/29/2020

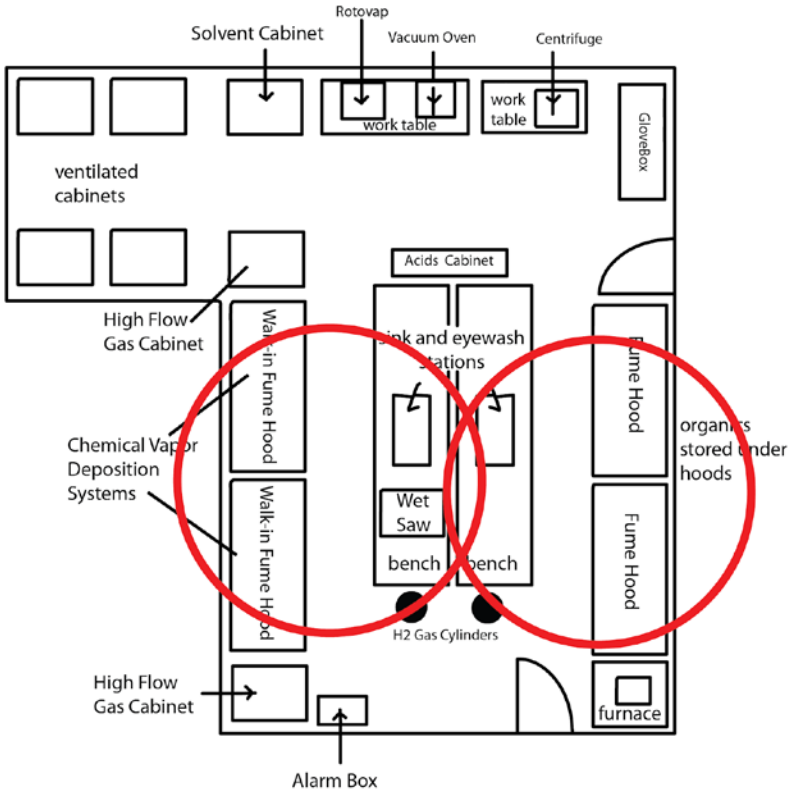
Caudill 024



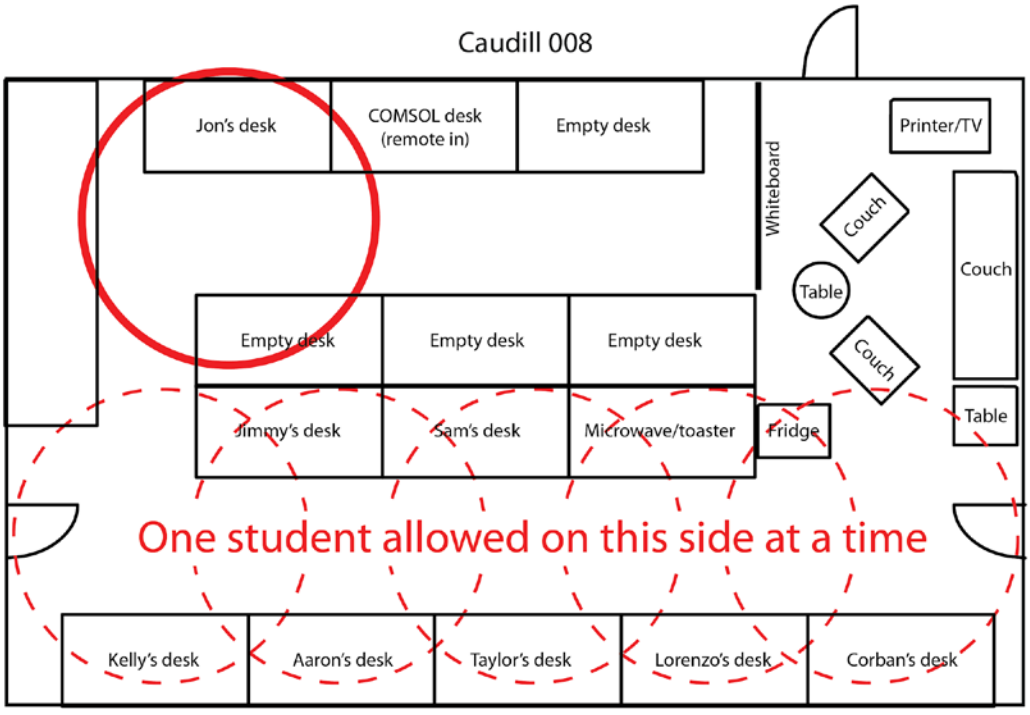
Caudill 025



Caudill 134



Caudill 008



(not to scale)

Dempsey Group

DEMPSEY Group Phase 2 Resumption of Research Operations

Last updated: May 31, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	9
# of postdocs	3
# of visiting scientists	0
# of undergraduate researchers	2 (not currently working)
# of research technicians	1 (to be hired)

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  The Dempsey Lab will work a one-week-on, one-week-off schedule. The lab is split into two teams (A and B), each with 6 students/postdocs. Each week, only the A or B team will be working (6 students/postdocs maximum). Weeks are defined as Saturday—Friday. Worker attendance will be logged using a shared excel document in Microsoft OneDrive.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  The Dempsey group does not have any areas where distancing guidelines will be unable to be met.

- Indicate the maximum occupancy for each room associated with your research program.

  Kenan C-441 Max Occupancy 6
  Kenan A-403 Max Occupancy 4

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

  Attached

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
  At the start/end of each day and 4 times throughout the day

- What is your protocol for sanitizing equipment?
  Gloveboxes front surfaces will be washed with isopropanol and gloves wiped down with disinfectant wipes before/after each use

All other instruments that are not used exclusively with gloved hands will be wiped isopropanol or ethanol

- When will personnel wash and sanitize their hands while in lab?
  Personnel will wash their hands at least every hour, upon arrival, before/after using the restroom, before/after putting on a mask, before/after taking a break, before/after entering common areas (hallways and stairwells), and before departing the lab each day.

What is your policy for wearing masks in lab?

Masks will be worn at all times. When working in the lab at hoods and benches, personnel will wear cotton masks and face shields. When working at the gloveboxes, personnel will wear a cotton mask. When at desks or in common areas, personnel will wear a UNC-provided mask or a personal mask.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed Name	**Signature or initials**	**Date**
Debanjan Dhar	DD	06/01/2020
Kedy Edme	KE	6/1/2020
Sean McWilliams	SFM	6/1/2020
Carolyn Hartley	CH	6/2/20
Brittany Huffman	BLH	6/1/2020
Diane Isaacs	DPI	6/1/2020
Aldo Jordan	AMJ	06-01-2020
Melody Kessler	MLK	6/1/2020
Katherine Lee	KJL	06.01.2020
Ann Marie May	AMM	06/01/2020
Michael Mortelliti	MM	06/01/2020
Tayliz Rodriguez	TMR	06/01/2020

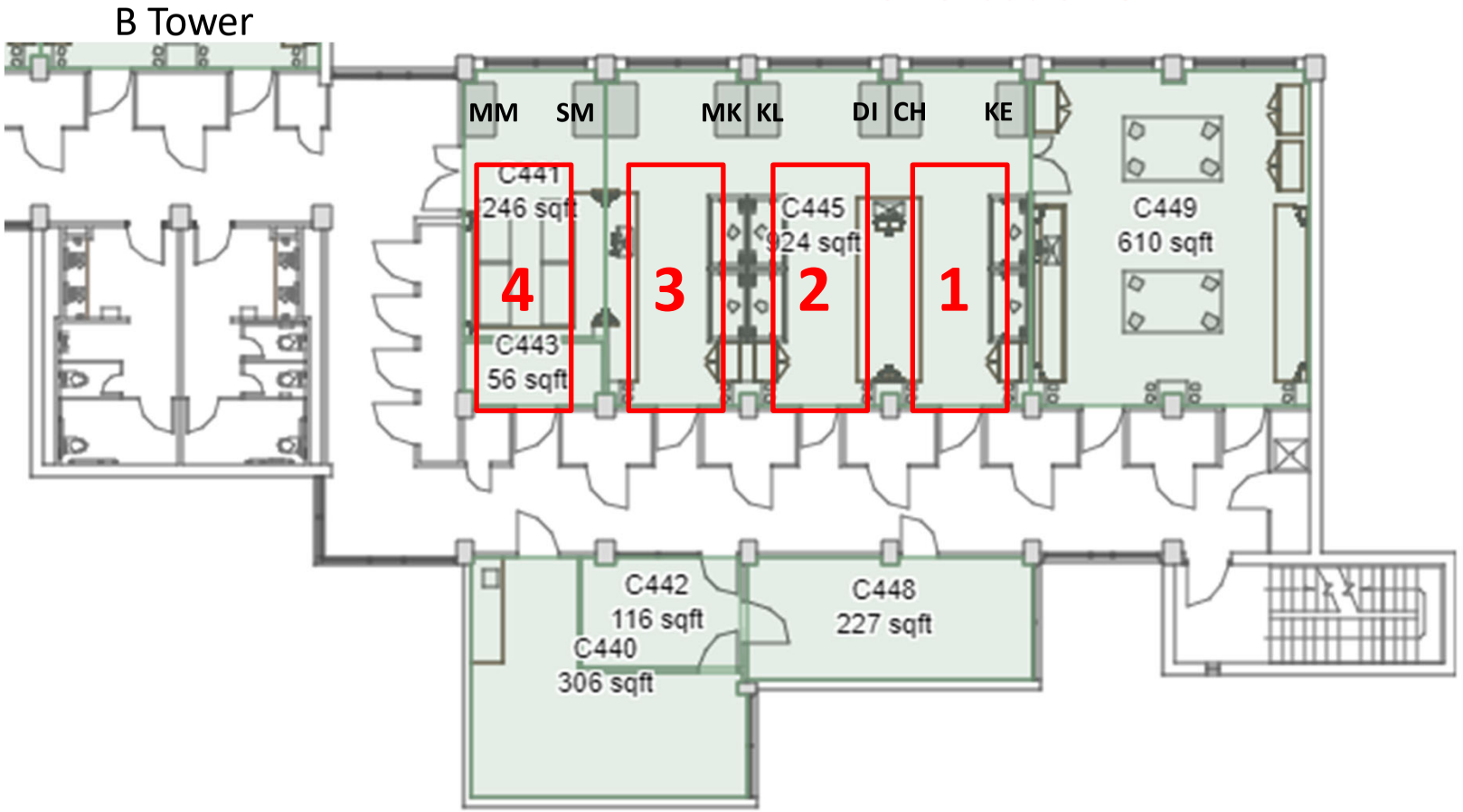
By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name Signature Date

Jillian L. Dempsey 6/2/20

Kenan 4th – C Tower

Each numbered zone can contain 1 worker at a time



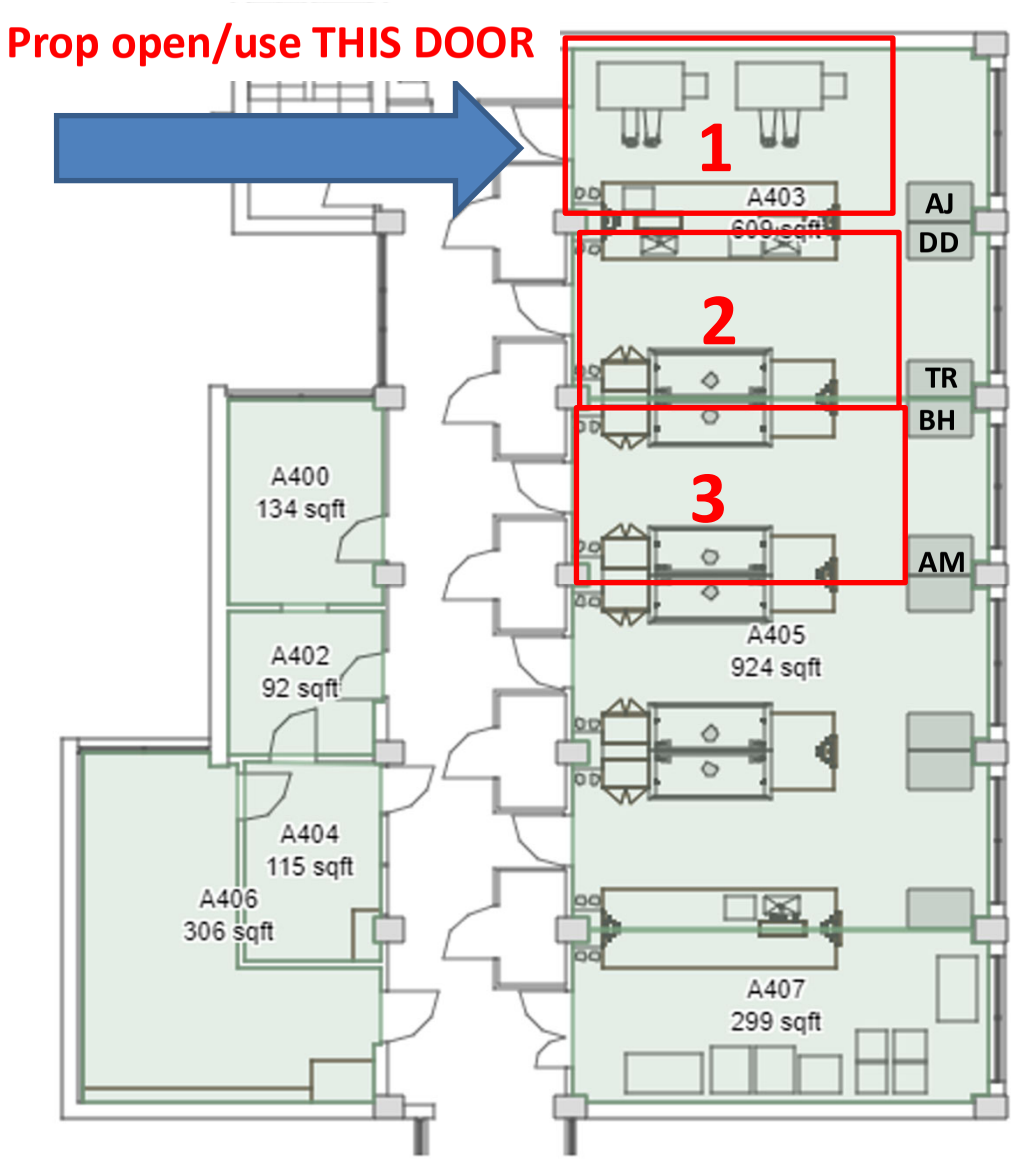
3-4 people in C Tower

Maximum occupancy: 6

*Max occupancy accounts for emergency repair personnel, A-tower personnel entering to get a chemical/UV-Vis, etc., NOT standard work occupancy

Kenan 4th - A Tower

Each numbered zone can contain 1 worker at a time



2-3 people in A-tower (Dempsey)
Maximum occupancy: 4*

*same for Miller group

DeSimone Group

DeSimone/Mecham Group Resumption of Research Operations

Last updated: June 1, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to **Ralph House**.

Group demographics:

# of graduate students	0
# of postdocs	1
# of research staff	2
# of visiting scientists	1
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
  We will define a schedule for each lab and maintain an online schedule for each piece of shared research equipment in order to limit overlap of personnel.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
  We will tape off sections that contain multiple instruments and designate that only one researcher at a time is to be within the taped area. This is specifically necessary for areas where equipment is grouped together. We will also tape off areas based on the floor plan designations.

- Indicate the maximum occupancy for each room associated with your research program.
  236: 1, 237: 1, 234: 3, 233: 3, 232: 3.
- Attach a floorplan with demarcated areas (200 sq. ft.) for guiding social distancing.
  Each lab and office area that the DeSimone group uses are marked with the number of people allowed in each space. 236: 1, 237: 1, 234: 3, 233: 3, 232: 3. Both 233 and 232 are shared spaces with the Leibfarth researchers requiring coordination with those researchers. The floorplan is marked in orange to designate spaces where only researcher at a time should be located. The only exception to this may be in the event that training requires persons to be closer than social distancing allows. This should not change the number of allowable people in the lab or office space.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
  All surfaces will be sanitized at the beginning of the day. Assignments for specific lab area responsibilities will be dispersed to the group, these assigned areas will be sanitized at least every 4 hours during the work day. Used surfaces will be sanitized after each researcher has completed their work in that area before another researcher uses a specific area or piece of equipment. This includes door handles, desks, benches and equipment surfaces that are touched by hands
- What is your protocol for sanitizing equipment?

Wipe down with solvent (70% EtOH or IPA), commercial cleaner, or soap and water.

- When will personnel wash and sanitize their hands while in the lab?
  Researchers will wash or sanitize their hands each time they leave or enter the lab or move from desk to equipment/bench area before donning gloves or at least once per hour.

What is your policy for wearing masks in the lab?

Masks will be worn by all researchers in the lab and in public areas at all times. Masks that are exposed to VOCs will be removed and replaced immediately. Personal masks will be stored in a bag when not in use and replaced or cleaned as needed but at least once per week. Masks will not be shared.

All surfaces will be sanitized at the beginning of the day. Assignments for specific lab area responsibilities will be dispersed to the group, these assigned areas will be sanitized at least every 4 hours during the work day. Used surfaces will be sanitized after each researcher has completed their work in that area before another researcher uses a specific area or piece of equipment. This includes door handles, desks, benches and equipment surfaces that are touched by hands

- What is your protocol for sanitizing equipment?
  Wipe down with solvent (70% EtOH or IPA), commercial cleaner, or soap and water.
- When will personnel wash and sanitize their hands while in the lab?
  Researchers will wash or sanitize their hands each time they leave or enter the lab or move from desk to equipment/bench area before donning gloves or at least once per hour.

What is your policy for wearing masks in the lab?

Masks will be worn by all researchers in the lab and in public areas at all times. Masks that are exposed to VOCs will be removed and replaced immediately. Personal masks will be stored in a bag when not in use and replaced or cleaned as needed but at least once per week. Masks will not be shared.

Please have every member of your group read the plan and pledge, through their signature, their commitment to adhere to COVID-19 safety policies to help keep our community safe and prevent the spread of the coronavirus.

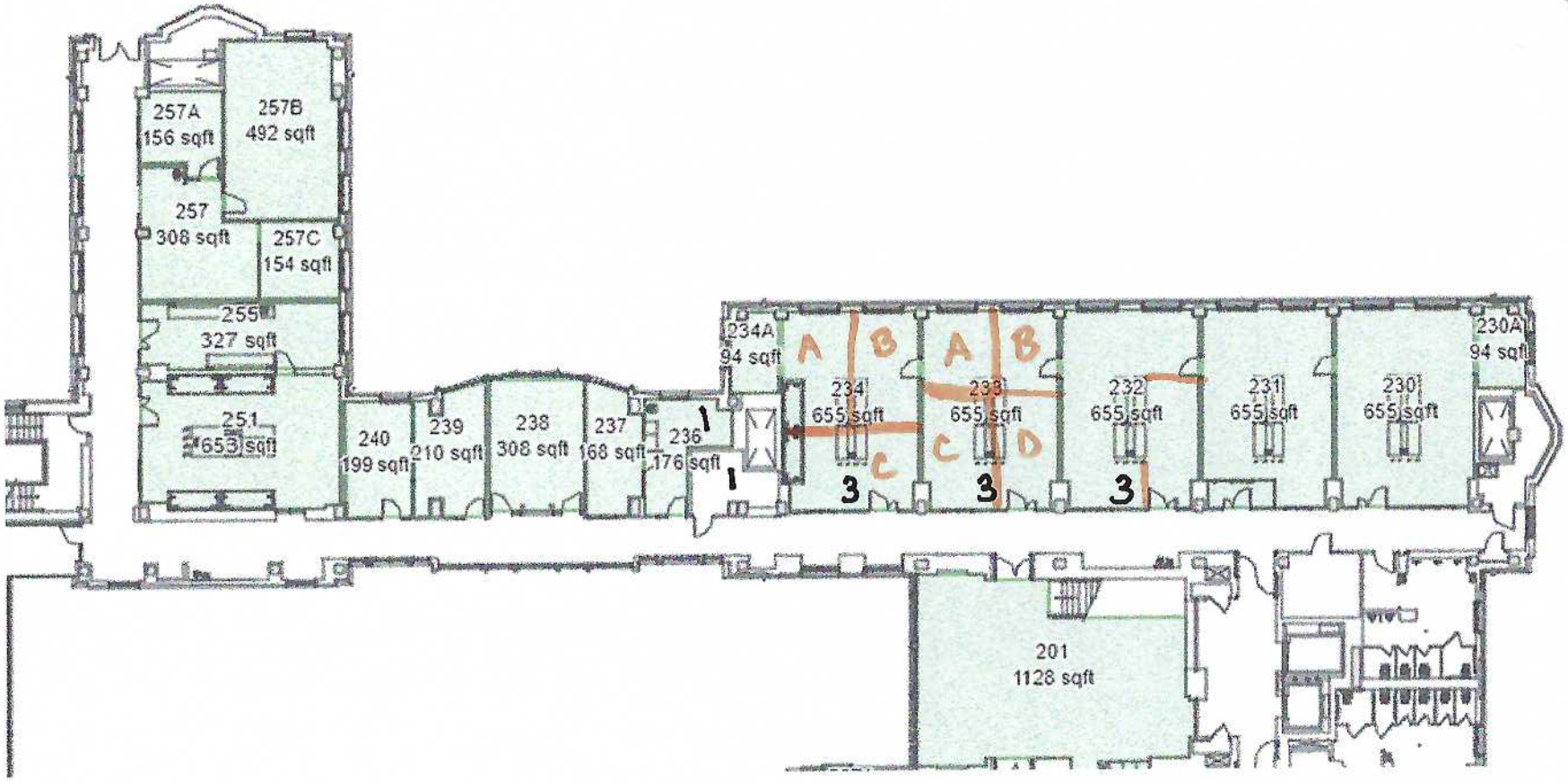
By signing below, I pledge to adhere to the policies in my lab, department, and the University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers and everyone I encounter who is working during this pandemic.

Printed name	Signature	Date
Kimon Iliadis	KIliadis	06/02/20
Addis Tessema		06/02/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name Sue Mecham Signature [signature] Date 6/3/20

Caudill 2nd North



Dick Group

Jeffrey E. Dick Group Phase 2 Resumption of Research Operations

Last updated: May 25, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics: I also note that I generally spend a significant amount of time in the laboratory performing experiments and will continue to work from home during Phase 2.

# of graduate students	8
# of postdocs	2
# of visiting scientists	2
# of undergraduate researchers	6

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

With no more than 8 people in the laboratory, **each group member will have up to 429 square feet to maintain social distancing**. Group members will be separated by project to minimize instrument overlap. We have enough potentiostats for each group member to have their own, minimizing the number of people touching a single instrument. All instrument reservations can be made online to ensure no overlap occurs. I have asked all my undergraduate students who generally contribute to our research progress, including those who are taking research credit hours, to stay home and contribute virtually during Phase 2. Students will fill out an attendance sheet on OneNote, accessible to all members of the group. If group members feel as though they are not comfortable with the number of people in the lab, they can stay home. Researchers will be asked to stay home if they are able to work from home to analyze/work-up data. The following is the schedule breakdown:
Monday: Goines, Kazemi, Voci, Tarolla, Reyes, Walker, Clarke
Tuesday: Goines, Kazemi, Voci, Tarolla, Reyes, Walker, Vannoy, Clark
Wednesday: Goines, Kazemi, Voci, Tarolla, Reyes, Walker, Clarke
Thursday: Goines, Kazemi, Voci, Tarolla, Reyes, Walker, Vannoy, Clark
Friday: Goines, Kazemi, Voci, Tarolla, Reyes, Walker, Clarke
Saturday: Goines, Kazemi, Voci, Tarolla, Reyes, Walker, Vannoy, Clark

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

This is not a problem in our lab with space and availability of instruments – each group member can have two potentiostats. Only two group members will work in the cell culture room, equipped with two biosafety cabinets. The wet lab (Caudill 334) is the laboratory that will have the most traffic. No more than 2 researchers can occupy this room at a time, and social distancing will be maintained while transferring chemicals and reagents between laboratories. Researchers will maintain an active level of communication with one another. In rooms where researchers are working, desks will be occupied at each end of the room.

- Indicate the maximum occupancy for each room associated with your research program.

Two people will be allowed per room given our lab layout. By sitting at desks at the opposite end of the room, they will maintain the 200 square foot separation. **Each student will be separated by a large double desk**. The breakdown is project-based:

Caudill 330 – Sondrica Goines and Nikki Walker

Caudill 331 – Kate Vannoy (T, R, S) and Joshua Reyes-Morales. Thomas Clarke will occupy the space MWF.

Caudill 332 – Silvia Voci and Nikki Tarolla

Caudill 333 – Rose Kazemi and Rebecca Clark (T,R,S)

Caudill 334 – Wet lab. In the beginning, no researchers will occupy this space.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

This will evolve over time. I hope that the verbiage above helps guide social distancing – it's rather tricky to put exact lines to the social distancing requirement.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

Once per hour by group members occupying that space. Kazemi will be responsible for sanitizing wet-lab surfaces once per hour. High touch surfaces will be sanitized with 70% ethanol.

- What is your protocol for sanitizing equipment?

Wet a paper towel with 70% ethanol to gently clean the surface.

- When will personnel wash and sanitize their hands while in lab?

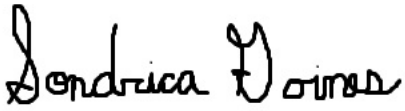
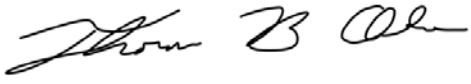
Every hour with soap and water as well as when they come to work and before they leave.

- What is your policy for wearing masks in lab?

All researchers are required to wear surgical masks, available in our laboratory, **at all times**.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Nicole Tarolla		6/1/2020
Rebecca Clark		6/1/2020
Silvia Voci		06.02.20
Rose Kazemi		06.02.20
Kathryn Vannoy		06.02.20
Nicole Walker		06.02.20
Joshua Reyes Morales		06.02.20
Sondrica Goines		6/01/2020
Thomas Clarke		6.03.20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Jeffrey E. Dick		25 May 2020

Erie Group

Erie Group Phase 2 Resumption of Research Operations

Last updated: May 28, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	**6**
# of postdocs	**1**
# of technicians	**1**
# of undergraduate researchers	**0**

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

We have set up a Teams site for the pod and lab to sign up (using Shifts) for times and dynamically indicate which rooms are occupied. Teams will allow us coordinate with all the researchers in the pod. Less than 50% capacity is maintained in this way, and personnel leave 30 minutes between working times.

Workers will sign up for time, and no more than 50% of my researchers will be working at any one time.

For all researchers in the pod, we are posting a floor plan for the pod with rules and max occupancy of all rooms.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

Instruments have a sign-up site as well to allow personnel to access them alone. Passing one another is avoided in shared spaces – each person allows another to move through before entering. 8 feet is always maintained between researchers.

- Indicate the maximum occupancy for each room associated with your research program.

See attached floorplan.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

See attached floorplan.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

Surfaces are sanitized using >70% ethanol immediately before and after use, at the beginning and the ending of each day, and at least four times per day.

- What is your protocol for sanitizing equipment?

Shared equipment is sanitized using >70% ethanol immediately before and after use.

- When will personnel wash and sanitize their hands while in lab?

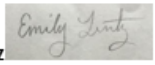
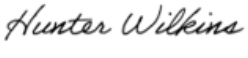
Personnel wash their hands upon arrival, every 60 minutes while in the laboratory, and before they depart.

What is your policy for wearing masks in lab?

Masks will be worn in the laboratory at all times, except for in the fluorescence and AFM rooms (4340 & 4334) where the doors are always closed and locked and only one person is working. Everyone knocks on closed doors before attempting to enter. Also, the door to 4340 has a window providing visual cues, and no one ever is allowed to enter 4340 without knocking. Both of these doors are keyed differently from the rest of the pod, so only a few people in my lab have keys to these rooms.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

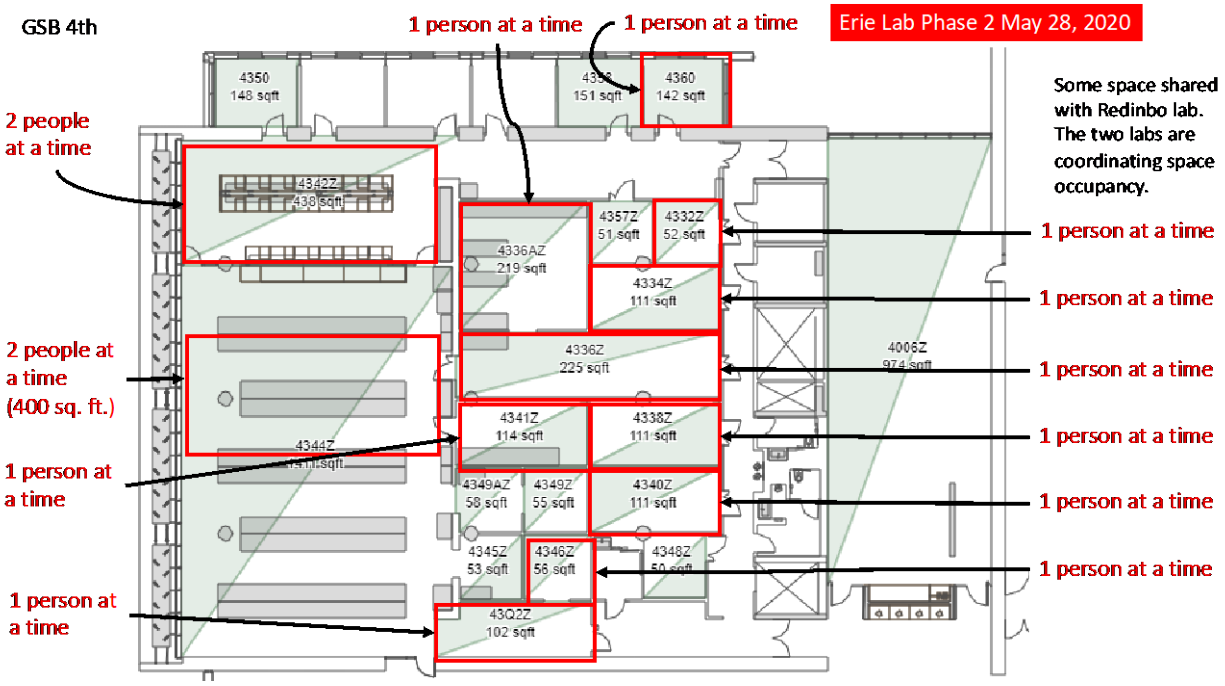
By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Sharonda LeBlanc		05/28/2020
Caitlin Johnson		05/28/2020
Sarah Marks		05/28/2020
Emily Lentz		05/28/2020
Kristen Irons		05/28/2020
Hunter Wilkins		05/28/2020
Nolan Brown		05/28/2020
Andi Morgan		05/28/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site

research activity for either one individual or the entire group.

Dorothy Erie Dorothy Erie **May 28, 2020**



Gagné Group

Gagne Group Phase 2 Resumption of Research Operations

Last updated: May 25, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	5 (until Will comes)
# of postdocs	3
# of visiting scientists	0
# of undergraduate researchers	0 for summer

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
  Our current plan is as follows:

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7am-12:45pm	Youngran Hannah Xuan*	Youngran Neyen Xuan	Youngran Hannah Xuan	Youngran Hannah Xuan	Youngran Hannah Xuan	Youngran Xuan	Youngran Xuan
1:15pm-7pm	Anton Kat Neyen	Hannah Kat Anton	Anton Kat Neyen	Anton Kat Neyen	Anton Kat Neyen	Kat Neyen	Kat Neyen
Full day (7-7)	Eric	Bishnu	Eric	Bishnu	Eric	Bishnu Hannah	Eric Anton
WFH	Bishnu	Eric	Bishnu	Eric	Bishnu	Eric Anton	Bishnu Hannah
Max total in lab	4	4	4	4	4	4	4

*Xuan is a new lab member and will require training with various lab members starting with Hannah for safety. This may require switching shifts as needed to complete this training.
Lab members are expected to report only during their allowed times outlined in the schedule above. If they are able to complete their work from home during their scheduled times, they will share this plan with Mike via Slack, and other researchers may use that time provided that the number of researchers in a lab module does not exceed two. Mike will coordinate these temporary changes to the schedule.

For the purpose of contact tracing, we have established a google doc spreadsheet where all researchers will “clock in” and “clock out” their time on campus. This will be mandatory.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

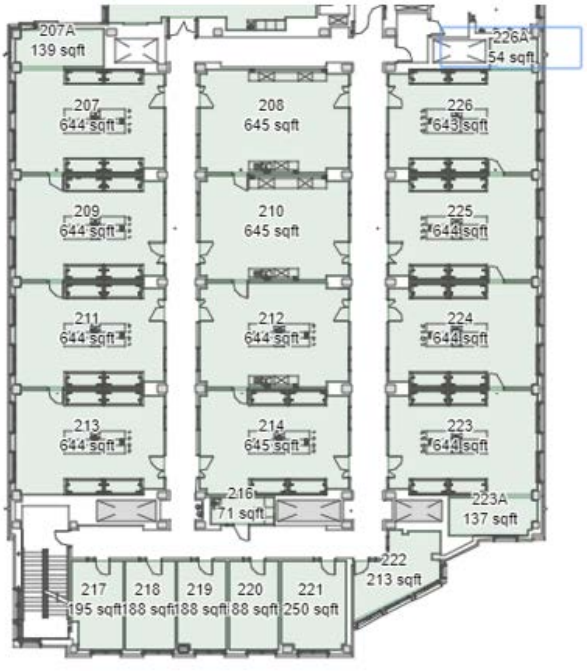
  Since each member has their own bench and hood, there are few instances where overlap will be a problem. One problem area, however, is our equipment room (room 210) where it is possible to have close contact between a GC-MS and single glovebox user, and a GC and double glovebox user (within 6 ft). These occurrences will occur only rarely, and we will post signs to remind lab members to plan so no such instances occur. Some lab members will need to sit at another desk temporarily to prevent breaking social distancing guidelines by sitting back to back. This is marked in the floorplans where only 2 people are at desks in any space at a given time.

- Indicate the maximum occupancy for each room associated with your research program.

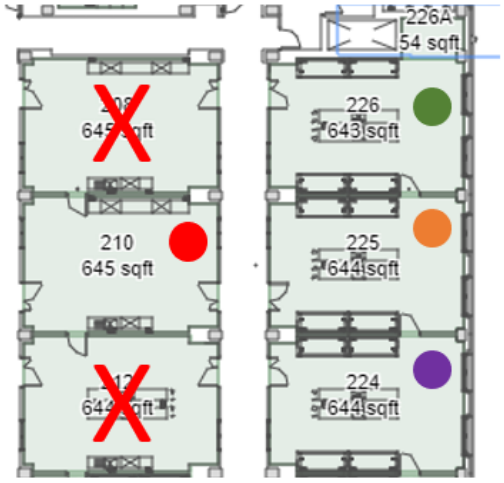
  Based on our square footage, our maximum occupancy is 3+ individuals per research module. This includes our equipment room, where researchers will regularly require access to glove boxes, GCs, etc. Our plan, however, is built around having no more than 2 researchers at desks in each lab space or 3 researchers at hoods.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

  Please see attached. Our plan ensures that never more than two individuals are present (desk) in a lab module. At the same time, the plan ensures that no two adjacent desks are simultaneously occupied. In some cases, this has required that someone change their desk space during their shift times.



Under these plans, no lab space will exceed 3 people and no one will be seated back to back



First asterisk indicates desk location, second indicates hood location

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
7am-12:45pm	Youngran** Hannah** Xuan**	Youngran Neyen Xuan	Youngran Hannah Xuan	Youngran Hannah Xuan	Youngran Hannah Xuan	Youngran Hannah Xuan	Youngran Hannah Xuan
1:15pm-7pm	Anton** Kat** Neyen**	Hannah Kat Anton	Anton Kat Neyen	Anton Kat Neyen	Anton Kat Neyen	Anton Kat Neyen	Anton Kat Neyen
Full day (7-7)	Eric**	Bishnu	Eric	Bishnu	Eric	Bishnu	Eric
WFH	Bishnu**	Eric	Bishnu	Eric	Bishnu	Eric	Bishnu
Max total in lab	4	4	4	4	4	4	4

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

  We will sanitize personal surfaces at the beginning and end of each shift regardless of whether or not they were used that day. Additionally, we will sanitize any surface immediately after using or a minimum of 4 times each shift. Lab, refrigerator, and freezer doors will be sanitized at the beginning and end of each shift, for a minimum of 4 times per day.

- What is your protocol for sanitizing equipment?

  Our main equipment that require regular sanitizing are the gloveboxes. These will be sanitized before and after all uses. Sanitizing the gloveboxes means using an ethanol solution to clean the gloves, antechamber doors and valves, screens, and main panel. Rotovaps must also be sanitized prior to and following any use. Lab members will only use the rotovap(s) in the room they work in. Oven doors should be wiped down at the beginning and end of each shift. Balances should be wiped down at the end of each shift if they were used. Other equipment should be wiped down prior to and immediately following its use. Depending on frequency of use, our equipment will be sanitized from 4-20+ times per day.

- When will personnel wash and sanitize their hands while in lab?

Immediately after arriving to lab, after reentering a lab space from anywhere other than that lab space, after removing gloves, and immediately prior to leaving for the day. These requirements will lead to handwashing greater than once per hour while on campus.

What is your policy for wearing masks in lab?

All researchers are required to wear a mask when in the chemistry buildings, even when they are alone in a lab module. If a researcher needs to remove their mask, they will need to step outside.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Hannah Starr	Hannah Starr	06/01/20
Youngran Seo	Youngran Seo	06/01/20
Bishnupada Sahpathi		06/01/20
Xuan Wang	Xuan Wang	06/01/2020
Neyen Romano	Neyen Romano	06/01/20
Kathleen Riley		06/01/20
Anton Gudz		06/19/20
William Hearne	William Hearne	06/19/20
Eric Roos		6/19/20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Prof. Michael R. Gagné		6/1/20

Glish Group

Glish Group Phase 2 Resumption of Research Operations

Last updated: May 27, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	6
# of postdocs	0
# of visiting scientists	0
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  No more than 3 graduate students will be in the lab at a time. Scheduling is done based on instrument needs (8am-1pm and 1:30pm-8:30pm shifts on any instrument). A set schedule has been made for these shifts and a group chat will be used to inform the next person when the previous person has cleaned and left the lab. Worker attendance will be logged by a paper attendance sheet on the door of the office (Caudill 326), at the end of the week the schedule will be scanned to ensure it is not lost. Graduate students will write their name, time into lab, the lab room they will be using, and their time out of lab.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  Instrument schedules have been made so that if one person is in lab (Caudill 323) working on the Esquire the person working on the closest instrument (the HCT, approximately 8 feet apart) will be using remote control from their desk in the office via anydesk. Social distancing will be met when the person working remotely is in the lab to set up and take down their experiments.

- Indicate the maximum occupancy for each room associated with your research program.

  Max occupancy for Caudill 323 by square footage is >6, so no more than 3 people will be there at a given time to abide by ≤50% capacity. Max occupancy for Caudill 325 and 326 based on one person per 200 sq ft is 3 so only 1 person at a time will be in those rooms. Maximum occupancy of Murray 2121 is >6 so no more than 3 people will be in the room at once.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

Keyboards, computer mice, light switches, shared chairs at the instruments, and door handles will be sanitized before and after use by graduate students. Surfaces will be sanitized at least once per hour with 70% isopropyl alcohol while lab members are present.

- What is your protocol for sanitizing equipment?

  Surfaces will be sanitized by thorough wiping with 70% isopropyl alcohol.

- When will personnel wash and sanitize their hands while in lab?

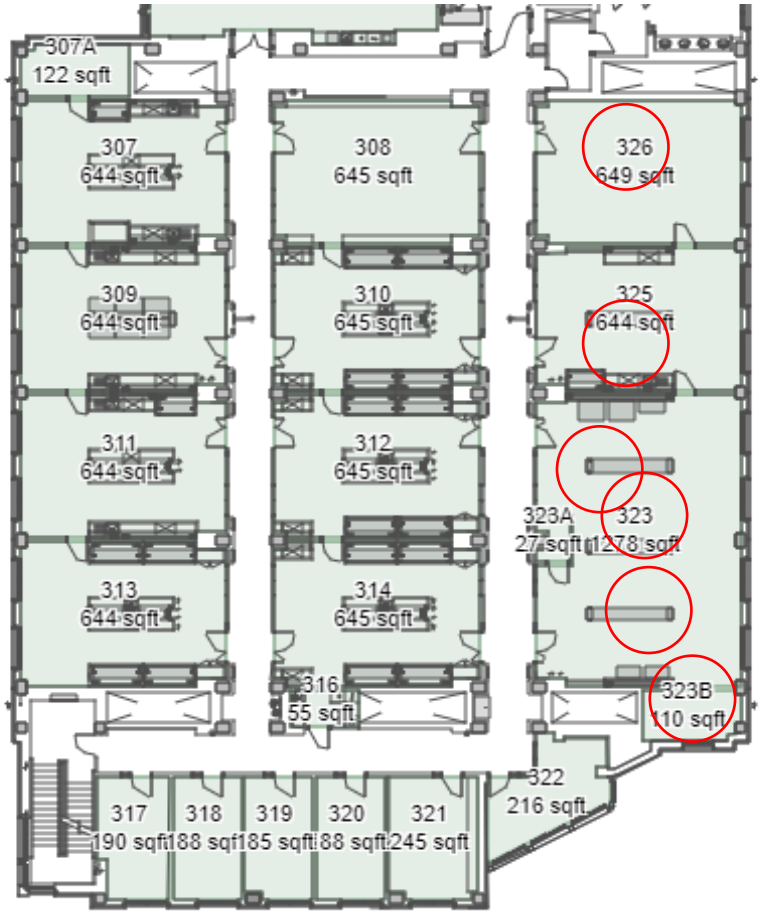
  Personnel will wash their hands upon entering and before leaving lab, as well as whenever changing gloves. Gloves will be changed once per hour or whenever contaminated with chemicals, whichever is more frequent.

- What is your policy for wearing masks in lab?

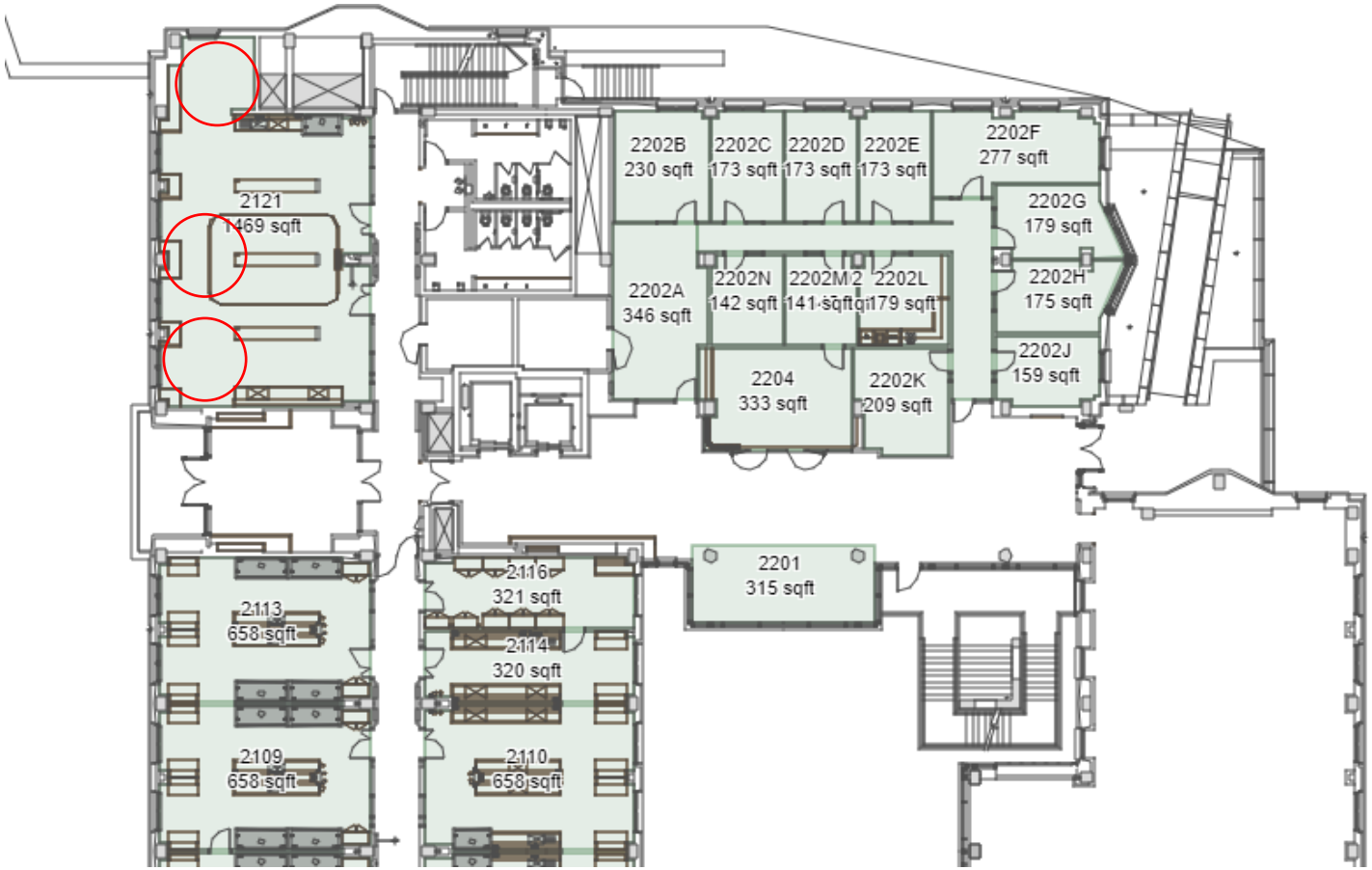
  Group members will wear masks at all times while working in lab and the office. Masks will be worn for several days before discarding and will cover the mouth and nose. Personnel will not touch their faces while wearing the masks and will wash hands before putting the mask on or taking it off.

Caudill 3rd South

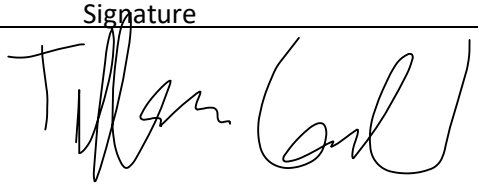
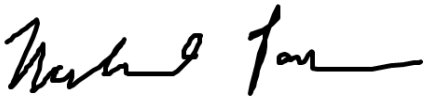
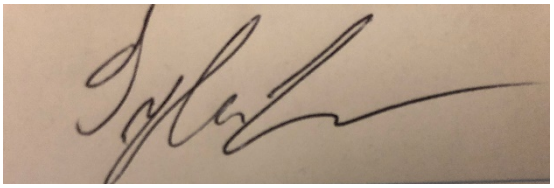
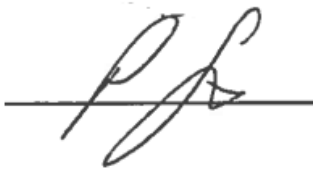
Only 1 of the 2 instruments with overlapping circles will be occupied at a given time



Murray 2nd North



By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Tiffany Crawford		5/26/2020
Nathan Park		5/26/2020
Tyler Larson		5/26/2020
Cameron Worthington		5/26/2020
Tavleen Kochar		5/27/2020
Paul Soma		5/27/2020
Gary Glish		5/29/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two

Hicks Group

Hicks Group Phase 2 Resumption of Research Operations

Last updated: July 10, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	7
# of postdocs	0
# of visiting scientists	0
# of undergraduate researchers	5

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
  - Based on our available lab space (2400 sq. ft.), we can accommodate 12 researchers with respect to the 200 sq. ft. requirement. This is without counting our office space, which has a total of 754 sq. ft. The Mass Spec Core has graciously allowed us access to B030 as an office space during phase 2, bringing our office space up to 1369 sq. ft., for a total of 3769 sq. ft. of space in Kenan. By limiting our active lab space to ≤50% personnel, we can safely accommodate 6 researchers. Our labs are divided into bays, with 2 in B031 and 4 in C045. We will never have more than 1 person per bay, ensuring consistent social distancing. Additionally, only 1 researcher will be allowed in B328 at one time. We have established a google spreadsheet to sign up for lab bays one week in advance. This will double as a log for worker attendance. No more than 6 grad students will be on campus at a time. Amanda Smythers, Safety Officer, will monitor the google sheet for discrepancies.
  - All researchers, undergraduate and graduate, will continue to work remotely as often as possible.
- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
  - We will open the door of the lab and wait for those in between the entrance and the needed area to stand aside. Based on our lab layout, we do not expect this to be an issue. None of our instruments are located in close proximity to each other.

- Indicate the maximum occupancy for each room associated with your research program.
  - Chemical room: 1 person
  - B tower lab: 2 people
  - C tower lab: 4 people
  - Bioroom: 1 person
  - Each office (including bioinformatics suite): 1 person

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing (pg 3).

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
  - As soon as someone gets to a work area, it will be sanitized with 70% ethanol. This will be repeated when the individual leaves. Each individual will be responsible for sanitizing with ethanol every 2 h (minimum) of their allotted work shift.

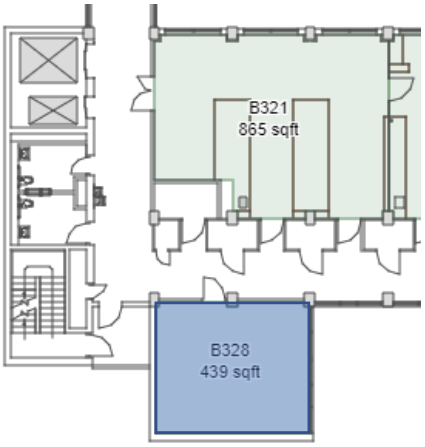
- What is your protocol for sanitizing equipment?
  - As soon as someone gets to a piece of equipment, it will be sanitized with 70% ethanol. This will be repeated when the individual leaves. All equipment will be handled with fresh (non-sample prep) gloves.

- When will personnel wash and sanitize their hands while in lab?
  - Everyone will wash their hands: when arriving to lab, when re-entering the building, before leaving the lab for the day, after handling materials someone else has handled (e.g. mail), and at least 1 time per hour.

What is your policy for wearing masks in lab?

- All researchers will wear a mask at all times. Additionally, all researchers will be responsible for taking their temperature before they come to campus. If their temperature reaches 100 °F (or is significantly higher than their normal core temperature), the researcher will not come to campus.
- Should it be necessary to work directly with another graduate student (primarily in the case of one-on-one training), researchers will wear a face shield in addition to gloves and a mask. Direct interaction will be minimized to the greatest extent possible.

Above: Ground floor Kenan. Purple rooms are used for office spaces and will have no more than 1 researcher per room at a time. Yellow denote primary lab spaces, and the designated bays are marked by a red dashed line. These bays are physically separated by lab benches and shelving. The blue areas are small alcoves in the lab that only 1 researcher can use at a time.



Left: 3rd floor Kenan. Only 1 researcher will be in B328 at one time.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Amanda Smythers	Electronic Signature	7-10-20
Anthony Ianetta	Electronic Signature	7-10-20
Samantha Balboa	Electronic Signature	7-10-20
Megan Ford	Electronic Signature	7-10-20
Tessa Moyer	Electronic Signature	7-10-20
Patric Sadecki	Electronic Signature	7-10-20
Kevin Culver	Electronic Signature	7-10-20
Wenya Jian	Electronic Signature	7-10-20
Holden Rogers	Electronic Signature	7-10-20
Wyatt Schug	Electronic Signature	7-10-20
Hailey Lewis	Electronic Signature	7-10-20
Saher Mubarek	Electronic Signature	7-10-20

By signing below, the Principal Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date

Johnson Group

Johnson Group Phase 2 Resumption of Research Operations

Last updated: May 27, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	9
# of postdocs	0
# of visiting scientists	0
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  To keep the lab space at ≤50% capacity the personnel will be divided in half and the groups will shift on a weekly basis.

  Group A: Kendrick Smith, Cody Padgett, Pedro de Jesús, Kimberly Alley, Robert Wiley

  Group B: Jacob Robins, Will Cassels, Nolan Turman, Evan Crawford

Week	June 1/ June 7	June 8/ June 14	June 15/ June 21	June 22/ June 28	June 29/ July 5	July 6/ July 12	July 13/ July 19	July 20/ July 26	July 27/ August 2	August 3/ August 9
Group	A	B	A	B	A	B	A	B	A	B

  The Johnson group has created a shift scheduler on Microsoft Teams where each person is required to log the hours they are present in the laboratory each day. Compliance is mandatory.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  The maximum occupancy of the instrument room (Caud. 212) will be set at two. All high-use instruments are adequately spaced to ensure appropriate social distancing.

- Indicate the maximum occupancy for each room associated with your research program.

  Caud. 211 – 1
  Caud. 212 – 2
  Caud. 213 – 2
  Caud. 214 – 2
  Caud. 223 – 2

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

At the beginning and end of every shift; before and after use (for relevant instrumentation); at least four times per shift. The same applies for handwashing.

- What is your protocol for sanitizing equipment?

  Sanitation solutions of ≥70% v/v EtOH (aq.) or isopropyl alcohol (aq.) will be provided or produced in-house and distributed to each room.

  - All surfaces will be disinfected at the start of each work day, at close of business, and at least four times in between.
  - A list of surfaces which need to be disinfected can be found here:
    - Door handles
    - Desk area
    - Dry ice scoop
    - Dry ice strap/lid
    - Rotovap handles/controls
    - Light switches
    - Microwave
    - Fridge/Freezer handles
    - Glassware oven door
    - Chemical cabinet handles
    - Inventory computer keyboard/mouse
    - Sink faucets
    - Storage drawer handles
  - Shared equipment will be sanitized before and after use. These items include: glovebox (gloves and plexiglass window); HPLC (keyboard and mouse); LCMS (keyboard and mouse); IR (keyboard and mouse); rotovap in Caud. 214 (handles and pump control); benchtop NMR; inventory computer (keyboard and mouse); chemical refrigerators and freezers.

- When will personnel wash and sanitize their hands while in lab?

  At the beginning and end of each shift; at least once every hour; immediately after interacting with anyone else

What is your policy for wearing masks in lab?

Masks will be worn at all times when in the building (hallways, at personal desks, when working at the fume hood, in the bathroom, etc.).

Other policies:

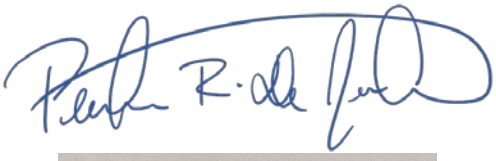
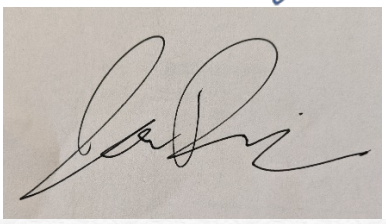
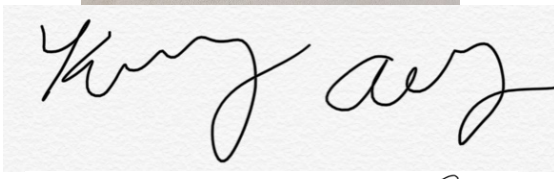
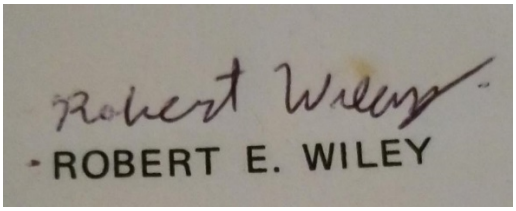
- Each person will be assigned a bucket for transport of chemicals between rooms. No other bucket should be used by an individual.
- A face shield will be required to work with pyrophoric reagents. Each person will be provided with a face shield and is responsible for sanitizing it after every use.
- Trash cans will be placed outside the lab rooms at the close of business for pick-up by housekeeping staff.
- New nitrile gloves (not cotton gloves) must be donned prior to use of the glove box. A supply will be placed nearby to facilitate compliance.
- In the event that OVCR requires a full lab shutdown, the following procedures will be enacted:
  - Both HPLCs and the IR spectrometer will be shut off and unplugged.

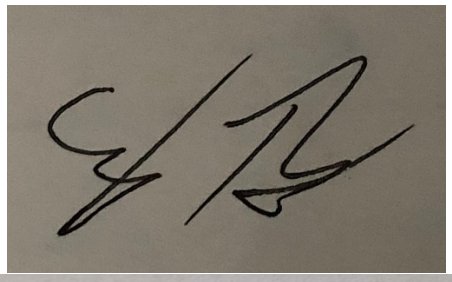
- The glove box will be plugged into the emergency power.
- All chemicals will be returned to their appropriate place in the chemical storage cabinets
- All chemical samples will be stored in the sample freezer or the appropriate bench drawer.
- All sink faucets will be securely closed.

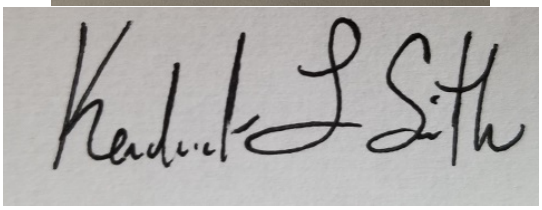
- This document will be clearly posted to the entrance of each room.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

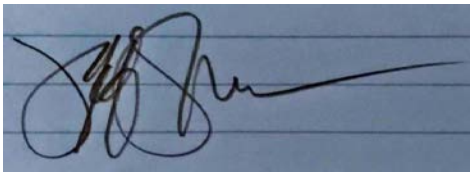
By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

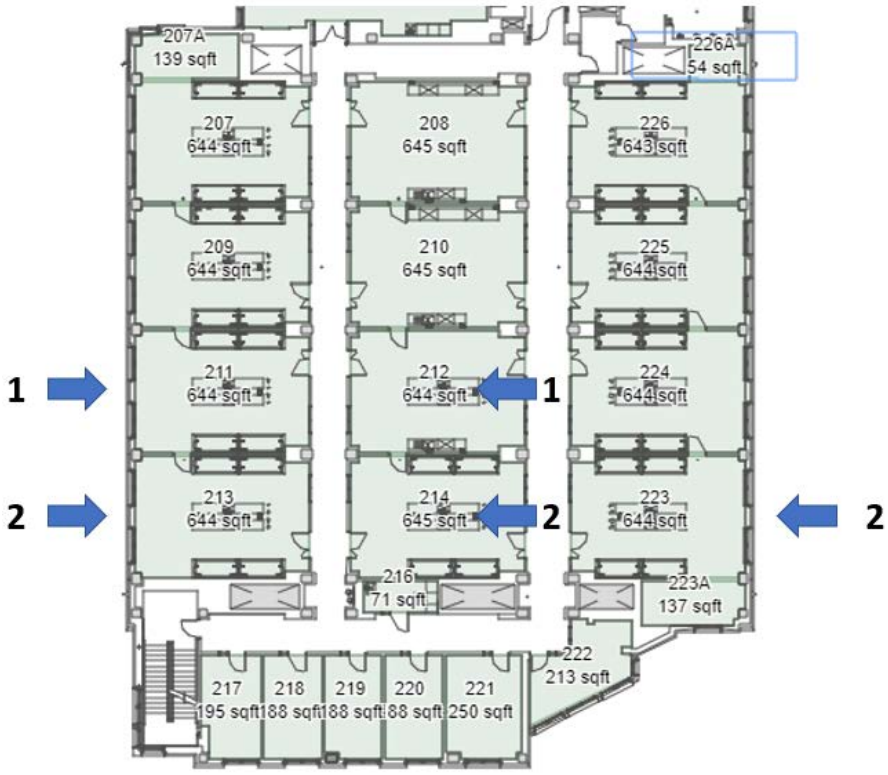
Printed name	Signature	Date
Pedro de Jesus Crúz		05/27/2020
Jacob Robins		05/27/2020
Kimberly Alley		05/27/2020
Evan Crawford		05/27/2020
William Cassels		05/27/2020
Nolan Turman		05/27/2020
Robert Wiley		05/27/2020

Cody Padgett  05/27/2020

Kendrick Smith  05/28/2019

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Jeffrey Johnson		05/27/2020


207A
139 sqft
226A
54 sqft
207
644 sqft
208
645 sqft
226
643 sqft
209
644 sqft
210
645 sqft
225
644 sqft
1
211
644 sqft
212
644 sqft
1
224
644 sqft
2
213
644 sqft
214
645 sqft
2
223
644 sqft
2
216
71 sqft
223A
137 sqft
222
213 sqft
217
195 sqft
218
188 sqft
219
188 sqft
220
188 sqft
221
250 sqft

Kanai Group

Kanai] Group Phase 2 Resumption of Research Operations

Last updated: May 27, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	5
# of postdocs	1
# of visiting scientists	0
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  Only one group member is allowed to work in the group office (Caudill 130) each day. Using when2meet scheduling system, the schedule for each week is determined on Sunday such that overlapping use of the group office by more than one person is avoided.

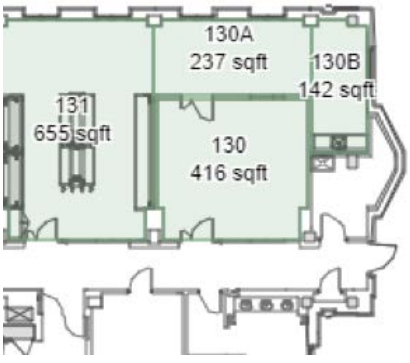
- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  No such areas exist since only the group office (Caudill 130) is used.

- Indicate the maximum occupancy for each room associated with your research program.

  One person in the group office (Caudill 130)

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.



Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

The assigned desk is cleaned in the morning and also when leaving the office with the sanitizing wipe provided in the office.

- What is your protocol for sanitizing equipment?

  No lab equipment exists in Caudill 130.

- When will personnel wash and sanitize their hands while in lab?

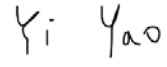
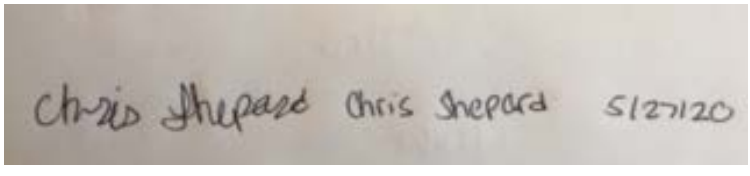
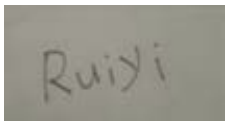
  Every time s/he enters the group office (Caudill 130).

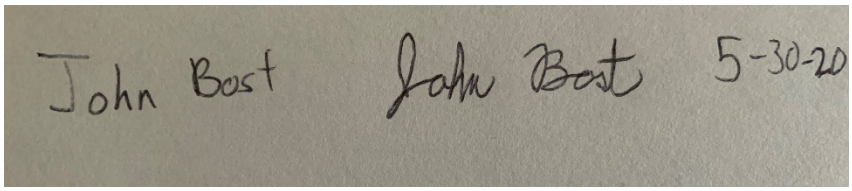
What is your policy for wearing masks in lab?

Not required inside the group office since only one person is allowed to occupy the room at any given time. The doors to the Caudill 130 will be remained closed all the time.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Sampreeti Bhattacharya.		05/27/2020
Jian Cheng Wong		05/27/2020
Yi Yao		05/27/2020
		
Ruiyi Zhou		05/27/2020



John Bost

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Yosuke Kanai		05/27/2020

Knight Group

Knight Group Phase 2 Resumption of Research Operations

Last updated: May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	6
# of postdocs	1
# of post bac	1
# of undergraduate researchers	5

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain less than or equal to 50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
    - 2 people per lab room, working at hoods that are catty corner to ensure maximum distance between researchers
    - 2 routine shifts (no more than four researchers)
        - 7:00 am - 12:00 pm (TWRF)
        - 1:00 pm - 6:00 pm (MTWR)
    - Opt-in shifts (must have two researchers/PI on site to opt-in, signup required 48 hours in advance to ensure proper social distancing guidelines are followed with four or fewer researchers present)
        - 6:30 pm - 8:30 pm (MTWR)
        - 9:00 am - 11:00 am (M)
        - 12:30 pm - 2:30 pm (F)
        - Saturday/Sunday timing at discretion of researchers
    - Worker attendance will be logged in advance via google calendar
        - This will ensure no more than four researchers will be present for any given shift
- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
    - We will have a plexiglass shield between our LCMS and peptide synthesizer. Movement between lab rooms will be discussed between lab members (via walkie talkies if communication over instrument noise is challenging across rooms) for shared equipment usage to allow for proper social distancing.
- Indicate the maximum occupancy for each room associated with your research program.
    - Each room is 650 sq ft, thus the maximum allowed by the university guidelines is 3.
- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
    - Any common surface that will be touched with ungloved hands (door handles and sink handles) at the beginning and end of the shift, and every two hours within the shift. Other surface that will be sanitized daily include, but are not limited to, benches, freezer and fridge door handles. One person will be designated per shift to complete these tasks.

- What is your protocol for sanitizing equipment?

    - Equipment will be used with gloves and will be sanitized with supplies provided by the university before and after each use (LCMS, peptide synthesizer).

- When will personnel wash and sanitize their hands while in lab?

    - Personnel will wash hands upon arrival and upon departure. Personnel will be washing their hands between glove changes with a frequency of at least once an hour.

What is your policy for wearing masks in lab?

Masks will be required at all times in lab. Currently no pyrophoric materials are used in the lab, but if any materials that could be considered hazardous are going to be used, a face shield will provide an additional level of protection and the procedure will be discussed with the PI.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

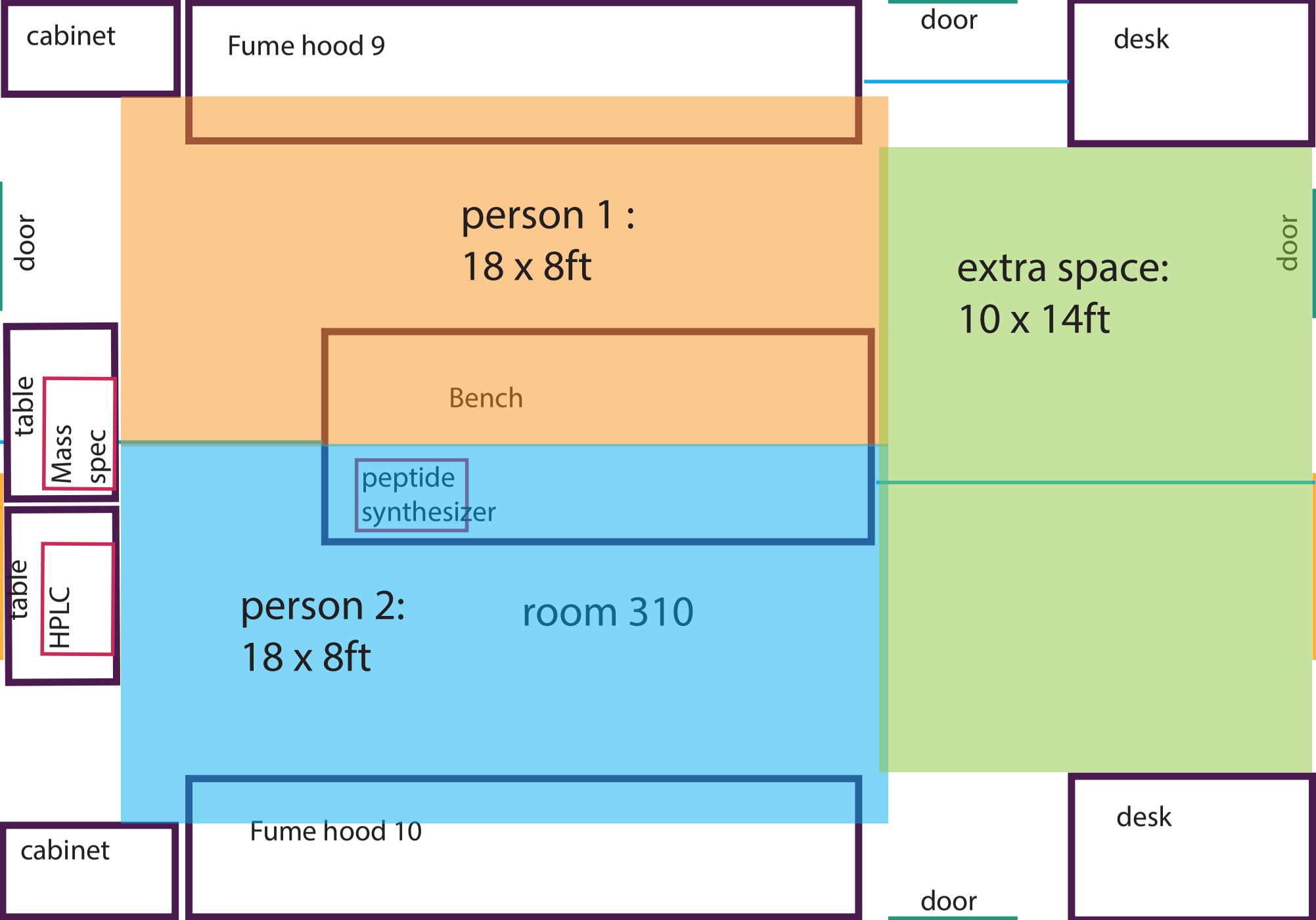
By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

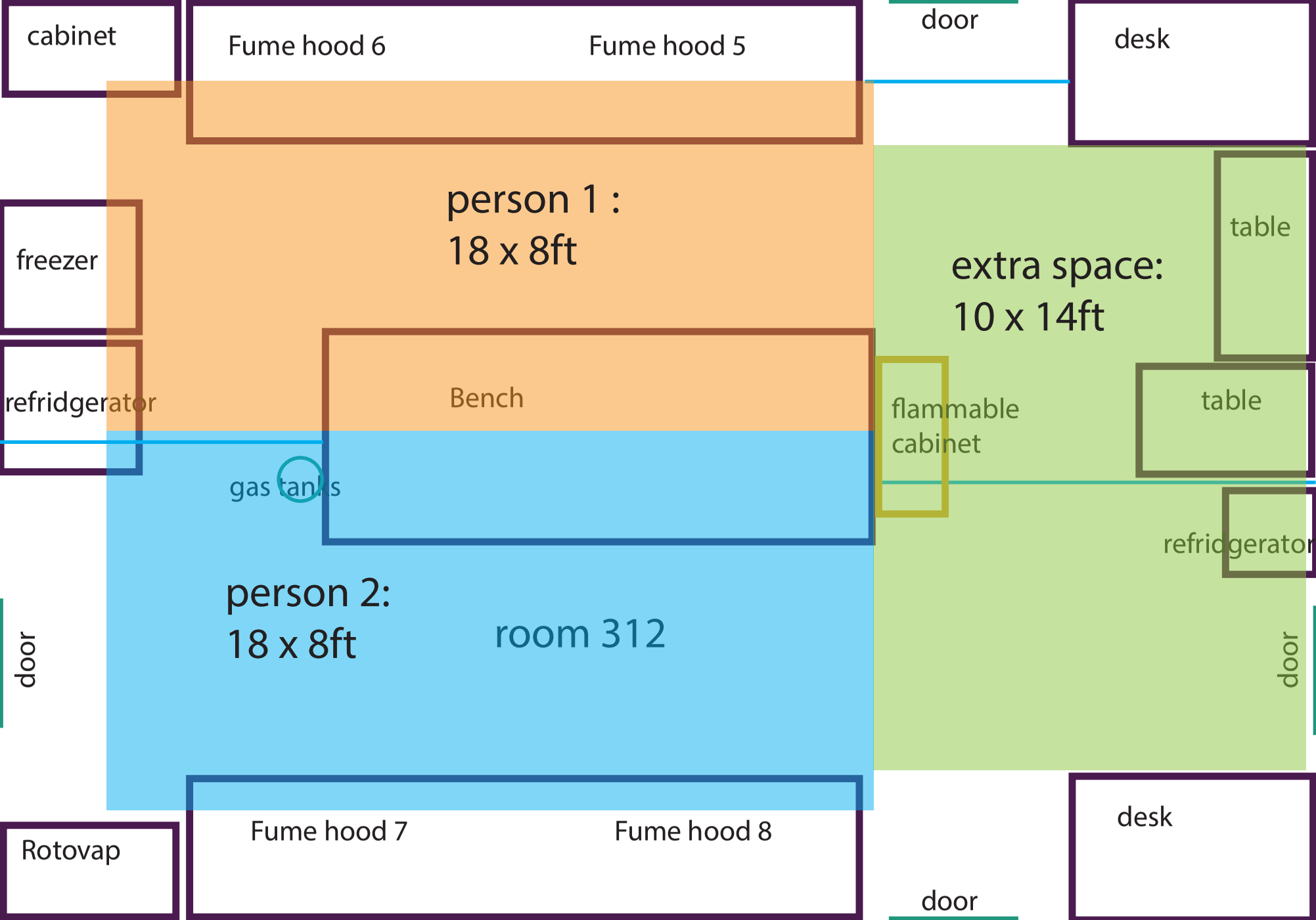
Printed name	Signature	Date
Rachel Cooke	Rachel Cooke	June 26, 2020
Nicole Sherman	Nicole Sherman (Jun 24, 2020 19:58 EDT)	June 24, 2020
Melissa Yu	Melissa Yu (Jun 24, 2020 19:54 EDT)	June 24, 2020
Delaney Davis	Delaney Davis (Jun 24, 2020 21:27 EDT)	June 24, 2020

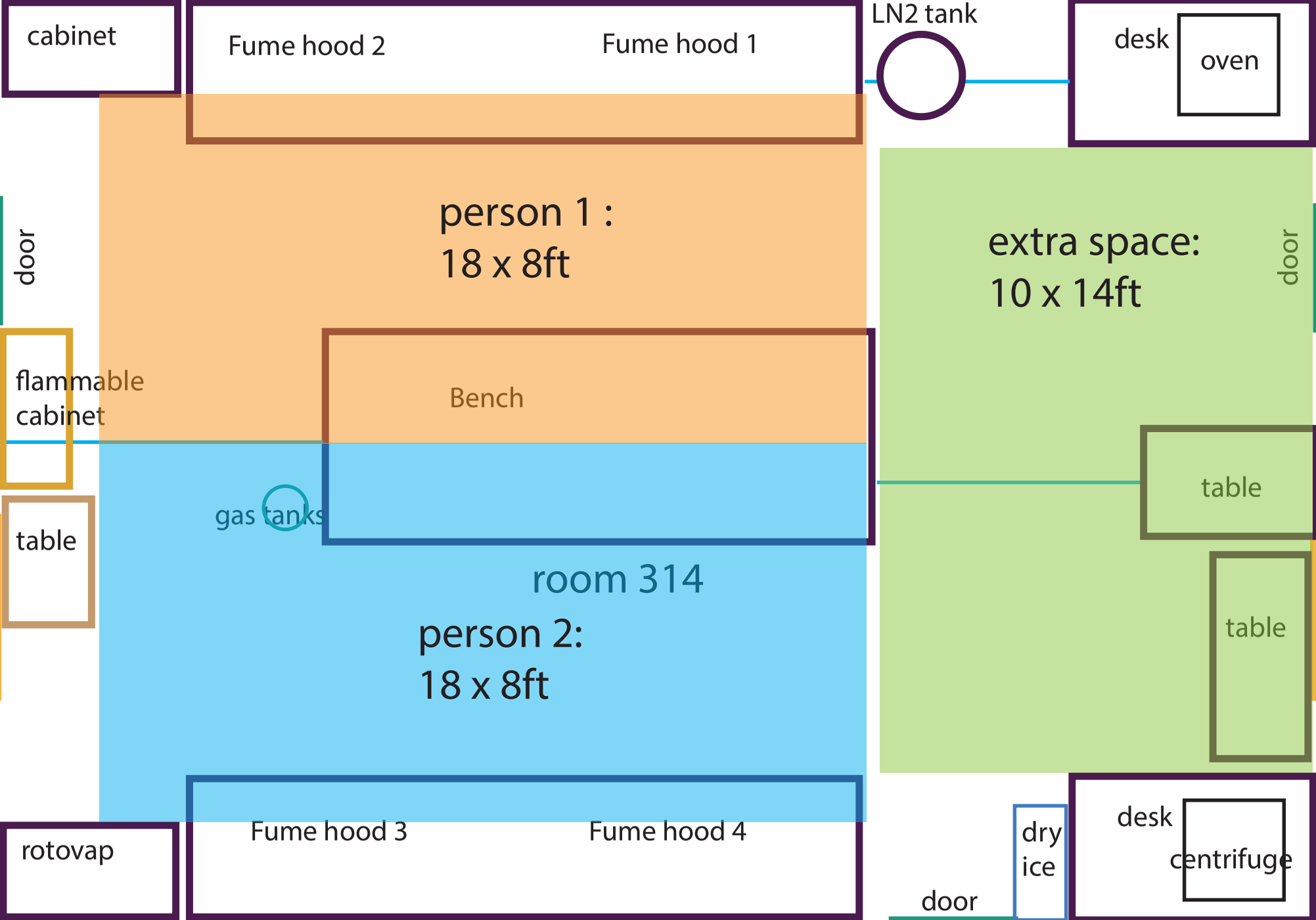
Kara Bucci	Kara Bucci (Jun 26, 2020 10:18 EDT)	June 26, 2020
Jeshurun Luke	Jeshurun Luke (Jun 24, 2020 22:48 EDT)	June 24, 2020
Ben Allen		June 24,2020
Matt Sanders	Matthew Sanders (Jun 25, 2020 07:20 EDT)	June 25, 2020
Hailey Taylor	Hailey Taylor	June 25, 2020
Jackie Warren		June 26, 2020
Meredith Barbee	Meredith Barbee (Jun 25, 2020 18:07 EDT)	June 25, 2020
Erin Day	Erin Day (Jun 25, 2020 [illegible]:39 EDT)	June 25, 2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Abigail Knight		June 27, 2020


cabinet
Fume hood 9
door
desk
door
person 1 :
18 x 8ft
extra space:
10 x 14ft
door
table
Mass spec
Bench
peptide synthesizer
table
HPLC
person 2:
18 x 8ft
room 310
Fume hood 10
cabinet
door
desk


cabinet
Fume hood 6
Fume hood 5
door
desk
person 1 :
18 x 8ft
freezer
extra space:
10 x 14ft
table
refridgerator
Bench
flammable
cabinet
table
gas tanks
refrigerator
person 2:
18 x 8ft
room 312
door
door
Fume hood 7
Fume hood 8
Rotovap
desk
door


cabinet
Fume hood 2
Fume hood 1
LN2 tank
desk
oven
door
person 1 :
18 x 8ft
extra space:
10 x 14ft
door
flammable
cabinet
Bench
table
gas tanks
table
room 314
person 2:
18 x 8ft
table
Fume hood 3
Fume hood 4
rotovap
dry
ice
desk
centrifuge
door

Lawrence Group

[David S. Lawrence - Kenan] Group Phase 2 Resumption of Research Operations

Last updated: May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	**5**
# of postdocs	**1**
# of visiting scientists	
# of undergraduate researchers	

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
  Three people working on 3 days per week shift: Mon-Wed or Thurs-Sat

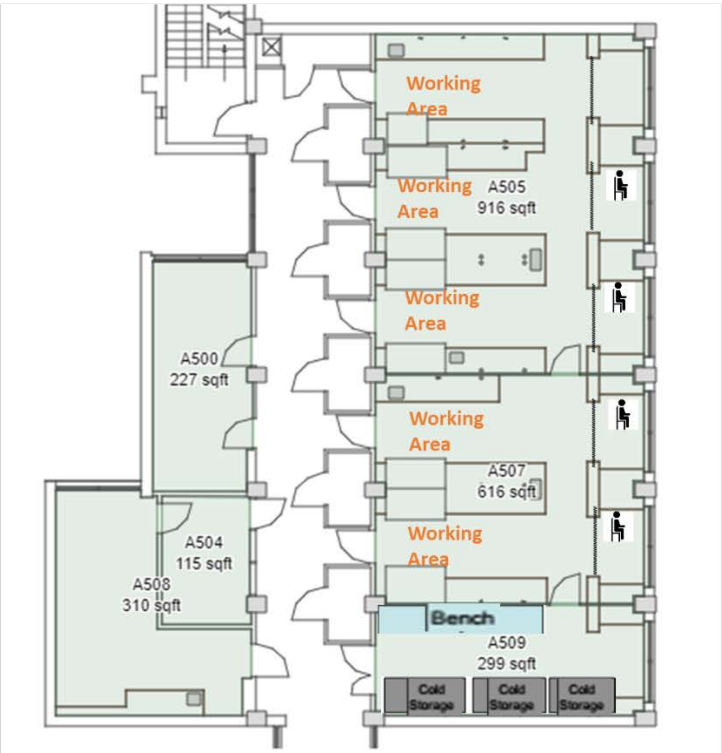
  Worker attendance will be recorded virtually on a lab-shared Google document.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
  In areas where social distancing guidelines cannot be met, such as walking area or when two instruments are near, only one person will be allowed in that space at a given time.

- Indicate the maximum occupancy for each room associated with your research program.
  Maximum occupancy for Room Kenan A505 is six and for Kenan A507 is five.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Kenan 5th A-tower



Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
  Lab surfaces and high touch areas within lab should be sanitized using ≥70% EtOH or IPA solution immediately before and after use and at least four times while at work. Thorough surface cleaning will be performed at the beginning and end of a shift.
- What is your protocol for sanitizing equipment?
  Shared equipment will be sanitized before and after use.
- When will personnel wash and sanitize their hands while in lab?
  Hands will be washed immediately upon arrival to lab and immediately before leaving. Hands will be washed and sanitized hourly while on campus and always after handling material that was in contact with another individual.

What is your policy for wearing masks in lab?

Masks will always be worn in lab, except when eating.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Qunzhao Wang	Qunzhao Wang	05/26/2020
Ju-Sung Kim	Ju-Sung Kim	05/26/2020
Caylie McGlade	Caylie McGlade	05/26/2020
Joshua Welfare	Joshua Welfare	05/26/2020
Matthew Anttila	Matthew Anttila	05/27/2020
Brianna Vickerman	Brianna Vickerman	05/27/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
David S. Lawrence		May 27, 2020

Leibfarth Group Phase 2 Resumption of Research Operations

Last updated: June 15, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	9
# of postdocs	2
# of visiting scientists	0
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  One group of 5 trainees: 8:00 am to 1:00 pm MTWRF; all day Saturday
  Next group of 6 trainees: 1:30 pm to 6:30 pm MTWRF; all day Sunday

  Each lab member will be required to fill out the following spreadsheet in order to track attendance in case of the need to contact trace:
  https://docs.google.com/spreadsheets/d/1Z5yChjIdqmMCk5pa87ykO3r9aFGaCHOA-B_vjHbeT5w/edit#gid=0

  To ensure that the density of workers in our lab space remains safe, it is imperative that trainees do not overlap in shifts.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
  - **In our labs, we have two main spaces for instrumentation where social distancing will be difficult. To alleviate potential issues of spacing personnel, we will schedule times for instrument use so that one instrument in such a space will be in use at any given time (see below for specifics on each instrument)**
  - **The desks in the labs are not 6 ft apart and thus we will stagger work schedules with this in mind so that personnel that are typically in close proximity at their desks will work different shifts. If this is not possible, we have additional desk spaces available in Caudill 240 to temporarily house personnel while in lab.**
  - **DSC**
    - **For members of the Leibfarth lab, sign up for time using the Gmail calendar. Additionally, a log book will be used for time in/time out. When actively using the instrument, you must communicate with others such that no one else is**

currently in the yellow taped off space (also comprising the DMF GPC, TGA, and rheometer). Use clean gloves when touching the instrument or computer. Please wipe down the equipment before and after you're done. This will mean any surface you touch such as the mouse, keyboard, etc. Supplies are provided to do this. Ask someone if the supplies are not easily found; they're limited so they may be in use somewhere else.

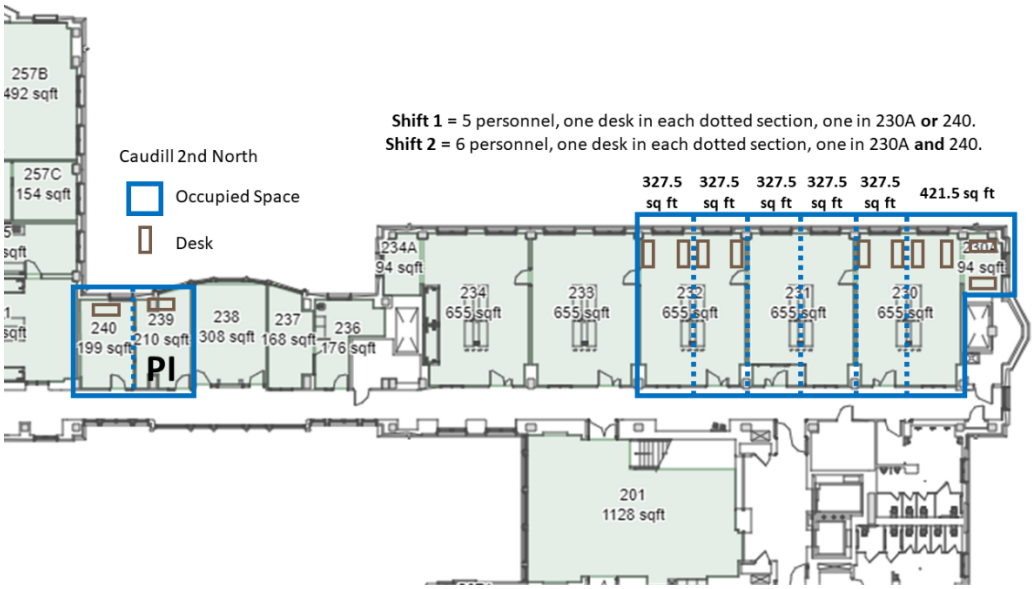
- **For members of other labs, contact Aaron Teator to run your sample for you.**

- **TGA**
  - **For members of the Leibfarth lab, sign up for time using the Gmail calendar. Additionally, a log book will be used for time in/time out. When actively using the instrument, you must communicate with others such that no one else is currently in the yellow taped off space (also comprising the DMF GPC, DSC, and rheometer). Use clean gloves when touching the instrument or computer. Please wipe down the equipment before and after you're done. This will mean any surface you touch such as the mouse, keyboard, etc. Supplies are provided to do this. Ask someone if the supplies are not easily found; they're limited so they may be in use somewhere else.**
  - **For members of other labs, contact Marcus Reis to run your sample for you.**
- **Rheometer**
  - **For members of the Leibfarth lab and members of other labs, book time using the Gmail calendar. When actively using the instrument, you must communicate with others such that no one else is currently in the yellow taped off space (also comprising the DMF GPC, DSC, and TGA). Use clean gloves when touching the instrument or computer. Please wipe down the equipment before and after you're done. This will mean any surface you touch such as the mouse, keyboard, etc. Supplies are provided to do this. Ask someone if the supplies are not easily found; they're limited so they may be in use somewhere else.**
- **Solvent system**
  - **For members of the Leibfarth lab and members of other labs, only use this when you can ensure 6 feet distance between you and anyone else currently working nearby. Additionally, remember to use the log book!**
- **DMF GPC**
  - **For members of the Leibfarth lab, a log book will be used as usual. When actively using the instrument, you must communicate with others such that no one else is currently in the yellow taped off space (also comprising the DMF GPC, DSC, and TGA). Use clean gloves when touching the instrument or computer. Please wipe down the equipment before and after you're done. This will mean any surface you touch such as the mouse, keyboard, etc. Supplies are provided to do this. Ask someone if the supplies are not easily found; they're limited so they may be in use somewhere else.**
  - **For members of the Knight lab, one individual is responsible for coming to our lab to run the lab's samples and get all data needed. Also, see above bullet point for additional important points regarding use of the instrument**

        - **For members of other labs, contact Nick Taylor to run your sample for you.**
    - **Glovebox**
        - **For members of the Leibfarth lab, a log book will be used as usual. When someone is actively using the glovebox, we must do our best to maintain proper 6ft social distancing. This may require walking through the hallway to go from Caudill 232 to 231. Use clean gloves when using the glovebox. Please wipe down the gloves and front glass pane with isopropanol before and after you're done.**
        - **At this time, members of other labs are not permitted to use the glovebox. Contact Phil Knutson if you need use of the glovebox, and a plan will be prepared.**
    - **High Temp GPC**
        - **For members of the Leibfarth lab and members of other labs, contact Jill Williamson to run your sample.**
    - **THF GPC**
        - **For members of the Leibfarth lab, a log book will be used as usual. When actively using the instrument, you must communicate with others such that you will be properly social distanced from others nearby. Use clean gloves when touching the instrument or computer. Please wipe down the equipment before and after you're done. This will mean any surface you touch such as the mouse, keyboard, etc. Supplies are provided to do this. Ask someone if the supplies are not easily found; they're limited so they may be in use somewhere else.**
        - **For members of the Knight lab, one individual is responsible for coming to our lab to run all of the lab's samples and get data needed. Also, see above bullet point for additional important points regarding use of the instrument**
        - **For members of other labs, contact Alexis Sarabia to run samples for you or set up an alternative plan.**
    - **Biotage**
        - **For members of the Leibfarth lab, a log book will be used to track time in/time out. When actively using the instrument, you must communicate with others such that you will be properly social distanced from others nearby.**
        - **Members of other labs are not permitted to use the Biotage at this time.**

- Indicate the maximum occupancy for each room associated with your research program.
    - **2 lab spaces (Caudill rooms 231 & 232), 655 sq ft = 3 personnel per room per shift**
    - **1 lab space (Caudill room 230), 749 sq ft = 3 personnel per shift**
    - **1 graduate student office space (Caudill 240), 199 sq ft = 1 person per shift**

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.



Include a plan and schedule for sanitization practices in your lab:

We will plan to sanitize surfaces frequently using ≥70% IPA. Door handles, desks, high use benches, and shared equipment will be sanitized a minimum of four times per day as well as additionally per use (i.e. before and after for equipment/instrumentation use).

- How often will surfaces be sanitized?
  - **Desks will be sanitized four times per day which includes before and after each shift using ≥70% IPA.**
  - **Lab benches used by a single person will be sanitized using ≥70% IPA before and after use and four times per day which includes before and after each shift.**
  - **Shared lab benches and surfaces will be sanitized using ≥70% IPA before and after use and four times per day which includes before and after each shift.**

- What is your protocol for sanitizing equipment?
  - **All equipment and instrumentation will be sanitized before and after use as well as before and after every shift using ≥70% IPA.**

- When will personnel wash and sanitize their hands while in lab?
  - **Personnel will wash hands (there is soap at every sink) every hour while in lab including before and after a shift as well as after returning to the lab from hallways.**

What is your policy for wearing masks in lab?

Masks must be worn at all times.

What is your policy regarding trainees outside of lab?

Outside of the lab, all personnel will be expected to abide by North Carolina's current COVID-19 guidelines for social distancing. We do not have an additional policy that prevents lab members from safely interacting with each other outside of lab.

If a member of the lab travels outside of the state or participates in an activity where social distancing is not possible, the lab member must contact the PI immediately to determine the length of self-quarantine required upon returning.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Irene Manning	Irene Manning	06/02/2020
Phil Knutson		6/2/2020
Victoria Barber	Victoria Barber	06-02-2020
Aaron Teator		6/2/20
Marcus Reis		6/2/20
Alexis Sanabia		6/2/20
Cole Sorensen		6/2/2020
Nicholas Taylor		6/3/2020
Sally Lewis		6/11/2020
Jill Williamson		6/15/2020
Travis Varner		6/17/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date

Li & Pielak Groups

Li & Pielak labs

Policies for
social distancing, shift work, sanitization, & maintaining safe working environment.

Genome Sciences, 3rd floor, red Pod.
May 29, 2020

Group demographics:

# of graduate students	9 (Li), 8 (Pielak)
# of postdocs	1 (Li)
# of technicians	1 (Li), 1 (Pielak)
total	11 (Li), 9 (Pielak)

Social distancing and shift work

Two shifts, 6 AM to 2 PM and 3 PM to 11 PM. A map for each shift is attached.
Tape demarcates boundaries on the floor or bench.
Maintain 250 square foot exclusion area.
Other practices as per the Provost's Direction and Guidance for Conducting Laboratory-Based Research on Campus and Phase 1 Resumption of Chemistry Operations
Masks to be worn at all times.

Sanitization

Every member:

Wipes common equipment and reagent bottles, etc. with alcohol after use.
Wipes desk and bench with alcohol at beginning and end of shift.
Wipes shared surfaces with alcohol twice in a given shift.
Washes and sanitizes hands with warm water and soap throughout the day.
Other practices as per the Provost's Direction and Guidance for Conducting Laboratory-Based Research on Campus and Phase 1 Resumption of Chemistry Operations

Passing work from shift to shift

Three ways:

Buddy system. Choose a buddy.
Write on windowpane in 3244 closest to the write-up area with supplied marker.
Use our slack account, bliblab.slack.com, pielakmafia.slack.com

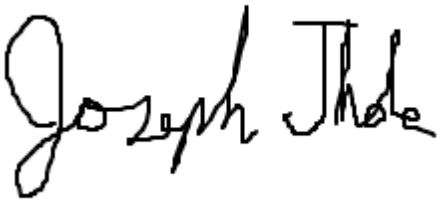
Maintaining safe working environment

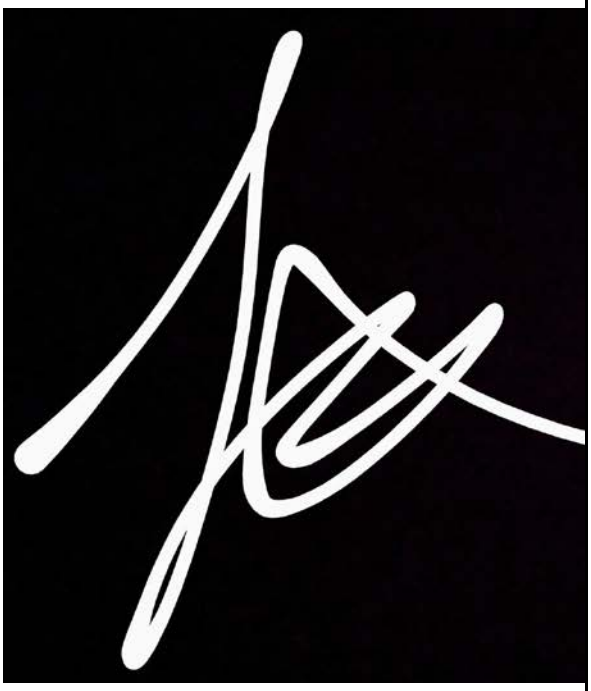
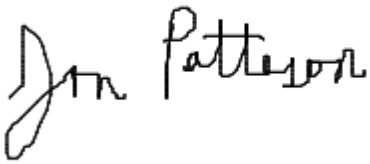
No gloves on door handles.
Maintain 250 square foot exclusion area.
Other practices as per the Provost's Direction and Guidance for Conducting Laboratory-Based Research on Campus and Phase 1 Resumption of Chemistry Operations

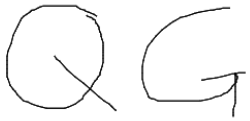
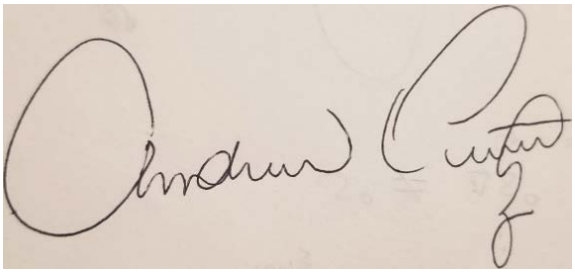
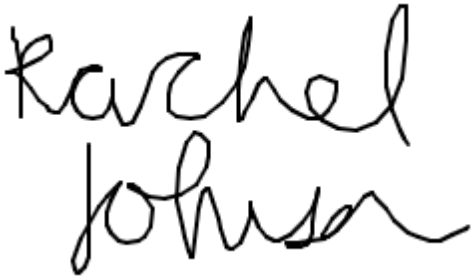
By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name Signature Date

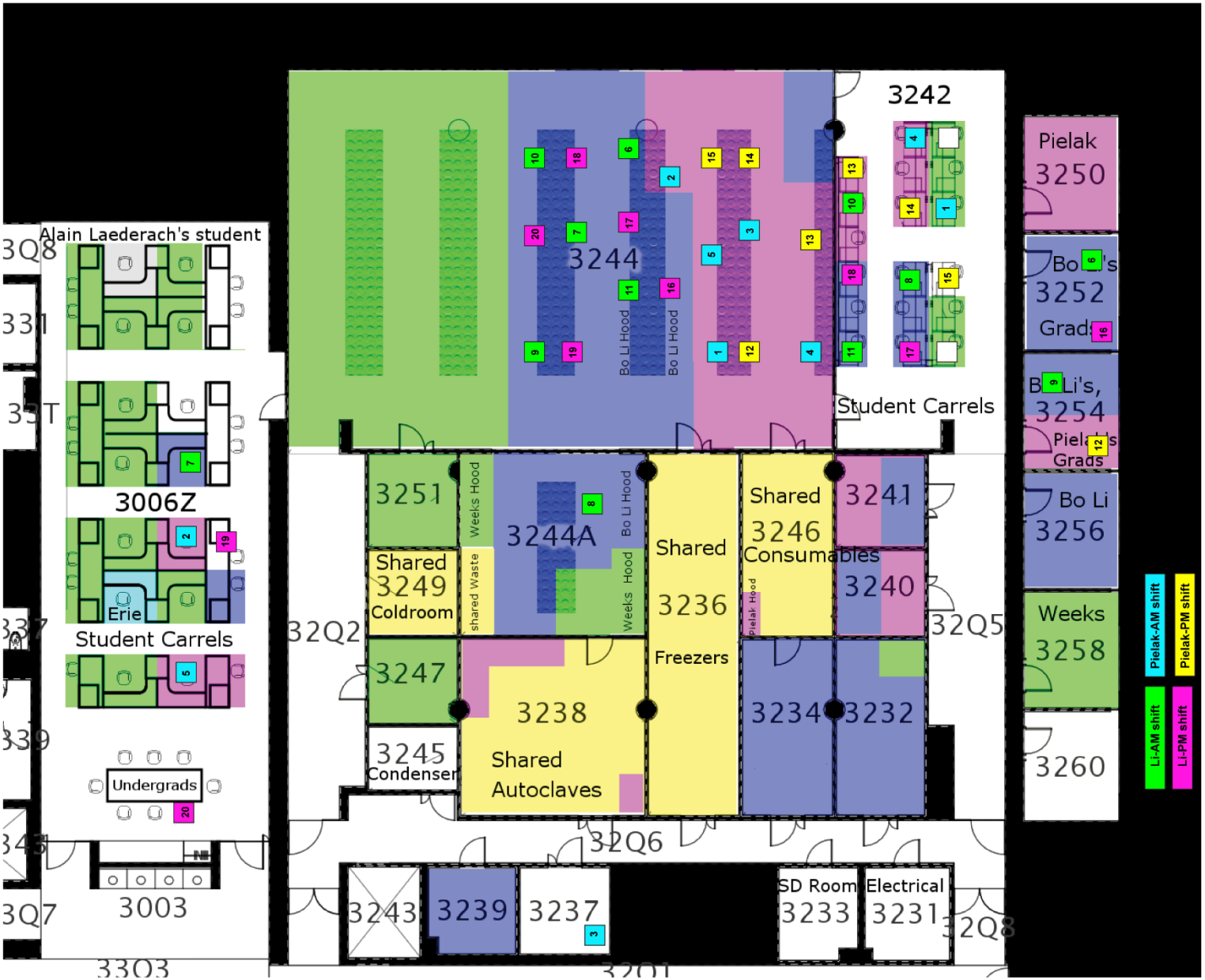
Katie Acken		5/29/2020
Claire Stewart		5/30/2020
Xiaoyan Chen	Xiaoyan Chen	5/30/2020
Adam Lescallette		5/30/2020
Julia Brom		5/31/20

Candice Crilly		5/31/20
Joseph Thole		05/31/20
I-Te Chu		05/31/20
Shannon Speer		05/31/20
Gina Morgan		5/31/20

Rachel M Johnson		5/31/20
Jonathan eicher		5/31/20
Gary Pielak		5/31/20
Jon Patteson		5/31/20

Qiang Guo		5/31/20
Andrew Putz		5/31/20
Will Simke		5/31/20
Sam Stadmiller		5/31/20
Rachel A. Johnson		6/1/20
Drake Crawford		6/1/20

Harrison Esterly	Harrison Esterly	6/1/20
Bo Li		6/1/20


Alain Laederach's student
3006Z
Erie
Student Carrels
Undergrads
3003
3244
Bo Li Hood
Bo Li Hood
3242
Student Carrels
Pielak
3250
Bo Li's
3252
Grads
Bo Li's,
3254
Grads
Bo Li
3256
Weeks
3258
3260
3251
Weeks Hood
3244A
Bo Li Hood
Shared
3249
Coldroom
shared Waste
Weeks Hood
Shared
3236
Freezers
Shared
3246
Consumables
Pielak Hood
3241
3240
3247
3238
Shared
Autoclaves
3245
Condenser
3234
3232
32Q2
32Q5
32Q6
3243
3239
3237
SD Room
3233
Electrical
3231
32Q8
Pielak-AM shift
Pielak-PM shift
Li-AM shift
Li-PM shift

Lockett Group

LOCKETT Group Phase 2 Resumption of Research Operations

Last updated: May 27, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	8
# of postdocs	0
# of visiting scientists	1
# of undergraduate researchers	4 during academic year 0 during summer

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  The maximum number of individuals in the laboratory will be four at any given time, with a maximum of two individuals in a single lab space. Work schedules will be coordinated with an online Google spreadsheet, which is accessible to all in the lab and can be updated as needed in real-time.

  https://docs.google.com/spreadsheets/d/1oJ5nXPuq7tOParzU7BGpEsGT5T0gQ_qCP_-vGm2wAmU/edit?usp=sharing

  Students will fill out the Google form, indicating which portion of the lab needed (B321 for cells work, B327 for molecular biology work, C-tower labs for device fabrication). All labs will be locked, and there will be clearly marked entrance and exit doors for traffic flow.

  Shift schedules are: 7am – 11:30 am, noon – 4:30 pm, 5:00 – 9:30 pm. The 30-minute buffer periods will be built into the schedule to ensure the lab is sterilized and vacated before the next researcher enters. We will strive to have two people in the lab at all times for safety purposes, but will rely on lab communication via our group Slack to make sure people working independently in the lab, message that they have safely exited.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  Given the way we are staggering shifts, social distancing guidelines should be met at all times.

- Indicate the maximum occupancy for each room associated with your research program.

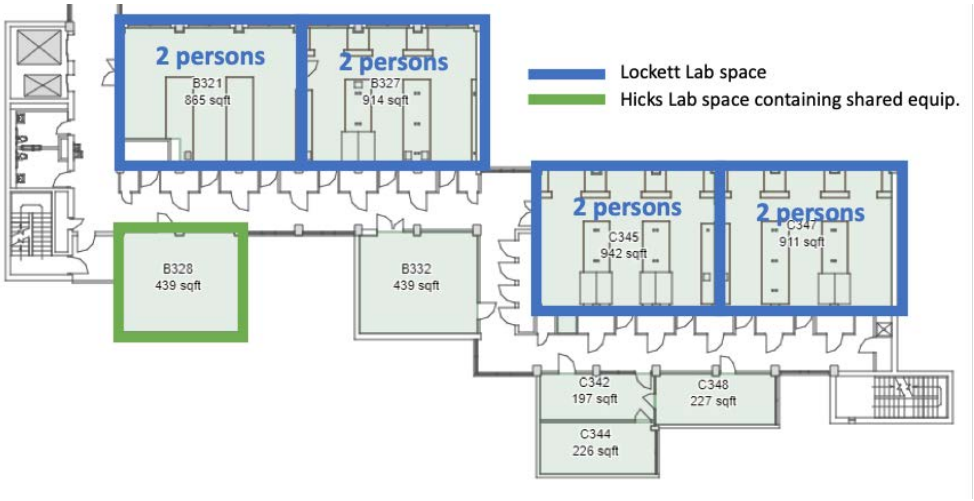
  50% occupancy of the laboratory ensures there is a maximum of four individuals across 3659 sq. feet. Kenan B321 will be the highest traffic research space during this time. Social distancing can be maintained in this space through the use of BSL 2 hoods on opposite sides of the laboratory and properly timed experiments to ensure no piece of equipment is needed by more than one person at a time.

  The maximum capacity for all laboratories is:
  B321 = 2 persons
  B327 = 2 persons
  C345 = 2 persons
  C347 = 2 persons

We also share instrumentation in B328 with the Hicks Laboratory and use the shared well plate reader in this room. Kenan B328 is part of the Hicks Laboratory Safety Plan, it is 439 sq. feet. We have worked out the following agreement:

Maximum capacity B328 = 1 person
For short protocols (<15 minutes), a magnet system has been devised to indicate whether the room is in use or free.
For longer protocols (>15 minutes), the Hicks lab is maintaining a Google calendar that both labs have access to for reservations.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.



Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

  Lab equipment and common research area sterilization will follow protocols commonly used in our BSL2 cell culture laboratory. All equipment will be sterilized before and after use with 70% ethanol solution. Hoods and benchtops will also be ethanol sterilized before and after use. Gloves are recommended to using equipment-related computer keyboards.

  When working in the lab, everyone will be required to sterilize commonly used equipment and lab surfaces every 60 minutes. A laboratory timer will be set for 60 minute-intervals, beeping of the timer requires everyone to stop their work and thoroughly sanitize the work-space as well as their hands. If individuals are in the middle of experiments, lab surfaces will be sanitized as soon as the experiment is completed.

- What is your protocol for sanitizing equipment?

  Lab equipment and common research area sterilization will follow protocols commonly used in our BSL2 cell culture laboratory. All equipment will be sterilized before and after use with 70% ethanol solution. Hoods and benchtops will also be ethanol sterilized before and after use. Gloves are recommended to using equipment-related computer keyboards.

  A final sterilization of all surfaces and equipment will occur at the end of a work shift.

- When will personnel wash and sanitize their hands while in lab?

When working in the lab, everyone will be required to thoroughly wash their hands every 60 minutes. A laboratory timer will be set for 60 minute-intervals, beeping of the timer requires everyone to stop their work and thoroughly sanitize their hands. If individuals are in the middle of experiments and wearing gloves, the gloves must be sprayed with 70% ethanol solution similar to the procedures used when entering the BSL2 hoods.

Individuals who are able to wash their hands at the 60 minute-mark, will be required to wipe down commonly touched items (e.g., refrigerator handles, door handles) with 70% ethanol.

What is your policy for wearing masks in lab?

Masks that meet the EH&S guidelines must be worn in the laboratory at all times, independent of the number of individuals present. Masks will be required at all times (e.g., in the lab, when moving between labs, and going through the building).

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

As of May 27th, each member has read and electronically typed/initialled in the signature line. A formalized signature will be obtained upon their return to the laboratory.

Printed name	Signature	Date
Matthew Lockett	MRL	05/27/20
Sabrina Cramer	SMC	05/27/20
Tom DiProspero	TJD	05/27/20
Tyler Larson	TSL	05/27/20
Zhi-Wei Lin	ZWL	05/27/20
Julie McIntosh	JCM	05/27/20
Zack Sitte	ZRS	05/27/20
Melanie Sinanian	MMS	05/27/20
Matthew Vangunten	MTV	05/27/20
Peter Willard	PSW	05/27/20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date

Lu Group

Zhiyue Lu Group Phase 2 Resumption of Research Operations

Last updated: May 25, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	1
# of postdocs	1
# of visiting scientists	0
# of undergraduate researchers	2

Detail your plans to maintain social distancing:

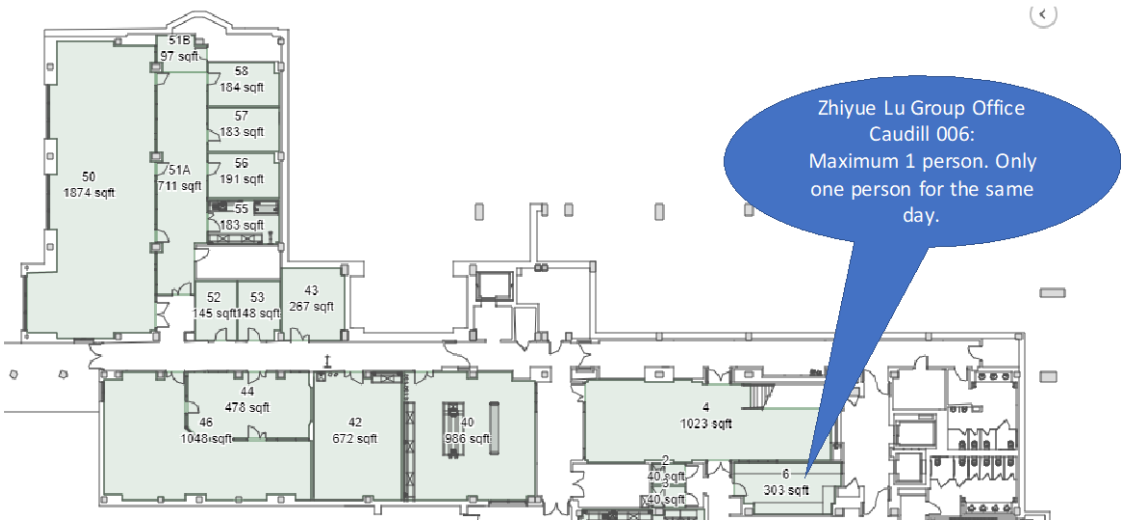
- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
  Answer: Our theory group encourage working from home. However, if the situation at home is posing a difficulty for one to perform the work, we will allow at most one person (graduate student/postdoc) to use the group office (Caudill 006) between 8am and 6pm. According to the departmental policy, only graduate students and postdocs are allowed to work on campus. We will communicate via our group's Slack channel to decide who will use Caudill 006 and when. Only one person will be allowed to use Caudill 006 each day so there will be at least 14 hours between two users uses the office. The PI will be using the single-use office (Caudill 020) only when necessary, but no in-person meeting will occur, and all of our meetings and discussions will be held via Zoom, Slack, Skype, or Facetime. Additionally, everyone will work with their own computer and no computer is shared.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
  Answer: N/A (Only one person is allowed in the group office per day.)

- Indicate the maximum occupancy for each room associated with your research program.
  Answer: 1 person maximum for Caudill 006 and 1 person maximum for Caudill 020.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Caudill Ground North



Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
  Answer: We ask whoever has to use the group office sanitize the surface (laptop keyboards, light switches, desk, chair, door, whiteboards/erasers) twice per day – before and after the use of the office.
- What is your protocol for sanitizing equipment?
  Answer: We will use Clorox wipes to wipe clean surfaces of laptop keyboards and other surfaces described above.
- When will personnel wash and sanitize their hands while in lab?
  Answer: We sanitize hands while entering and exiting the office with the hand sanitizer dispenser installed in the group office.

What is your policy for wearing masks in lab?

Answer: We do not require the use of mask when the user is in the office alone and the user will be alone in the office at all times. However, we do ask ourselves to wear mask when we are traveling outside the offices. In addition, the office door

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Sa Hoon Min		06/11 , 2020
Chase Slowey		06/11 , 2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Zhiyue Lu		June 11, 2020

Meek Group

Meek Group Phase 2 Resumption of Research Operations

Last updated: May 28, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	8
# of postdocs	0
# of visiting scientists	0
# of undergraduate researchers	2

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  We will have two work shifts per day, from 6:30am – 1:30pm & 2pm – 9:00pm
  Worker attendance will be logged on a google sheet and a historical record will be kept at https://docs.google.com/spreadsheets/d/19F11qWXX4dPPH-RazrQ4OGOMA05OLp9Qh6D7UjKh47I/edit?usp=sharing

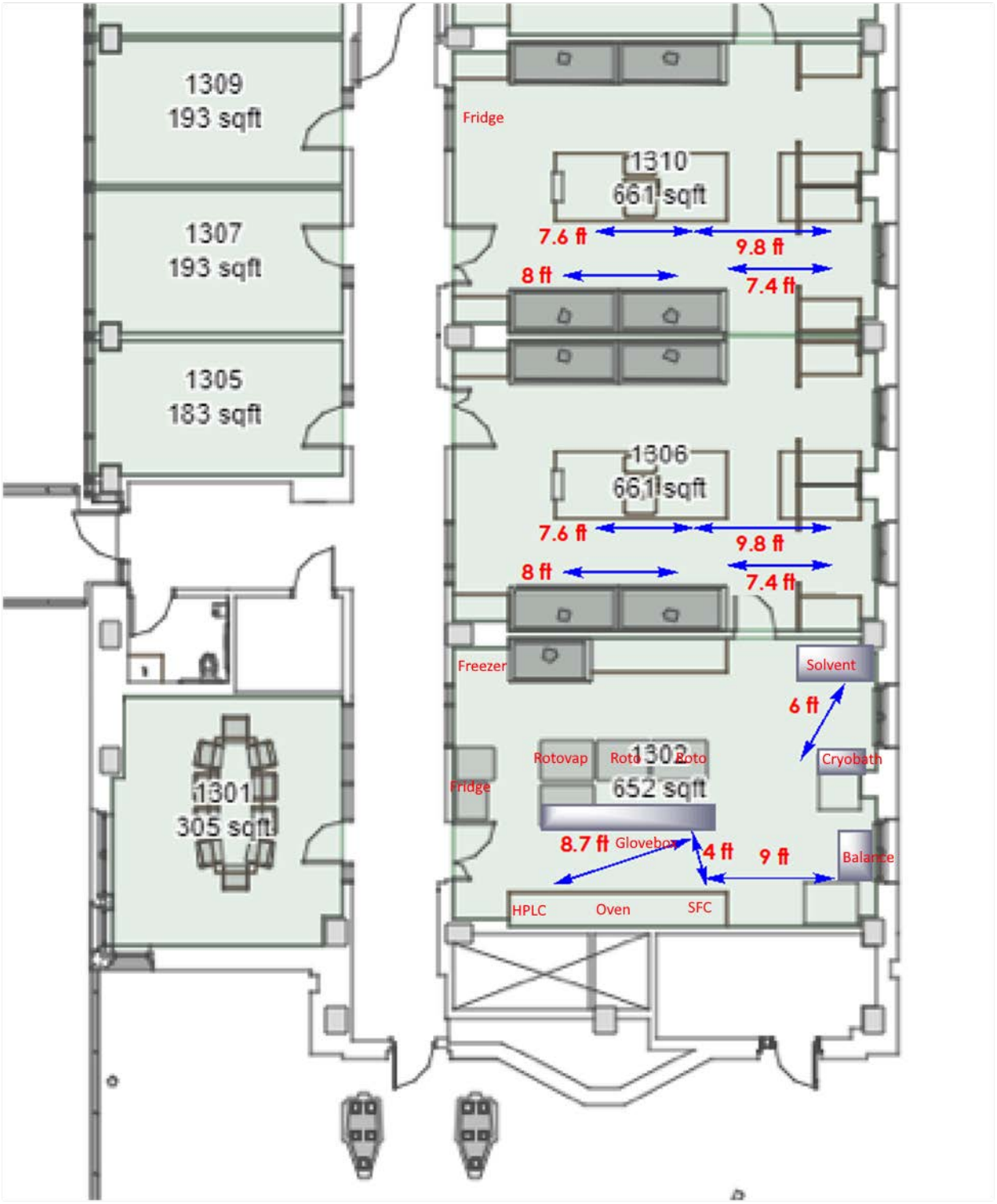
- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  For instruments that are <6 feet apart, only one worker will be allowed to operate an instrument such as the glovebox, HPLC, SFC, balance, and high-temperature oven at any given time. Our laboratory instruments are in a side room (venable 1302 where there are no desks or workspaces) which will be limited to 3 occupants at any given time.
  Specifically, groups of instruments that cannot be used at the same time are below:
  - Glovebox and SFC
  - Glovebox, and oven
  - Solvent system and cryobath

- Indicate the maximum occupancy for each room associated with your research program.

  Each room Venable 1302, 1306, and 1310 has a maximum occupancy of 3 during Phase 2. This will be posted on the door.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.



Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

  All surfaces will be sanitized at the beginning and end of each shift and after use, and every 2.5 hours. Ultimately, surfaces will be sanitized at a minimum of 4 times per shift (7hr shift). For example, for the 6:30am-1:30pm shift, surfaces will be sanitized at 6:30am, 9:00am, 11:30pm, and 1:30pm. This includes handles, light switches, desks, equipment surfaces, glovebox arms and further guidance can be found below.

- What is your protocol for sanitizing equipment?

Glovebox

1. Before use of *any* component of the glovebox, thoroughly wash hands with soap and water.
2. Then sanitize the glovebox by wiping down the chamber door handle and vacuum knob with 70% iPrOH or a disinfectant wipe. ***Note in the glovebox sign in page that these steps have been taken.***
3. Before entering the glovebox, please wear a ***long sleeve*** shirt that is to be kept ***in lab*** for glovebox use only as if it were a lab coat. Be sure to wear a clean pair of nitrile gloves.
4. While using the glovebox please take additional precaution to not intentionally touch your face to the glass.
5. When finished in the glovebox, wipe down the glovebox face shield ***and*** gloves with 70% iPrOH or a disinfectant wipe. ***Note in the glovebox sign in page that these steps have been taken.***
6. Upon removal of your materials from the glovebox, wipe down the knob and door of the ante chamber once more.
7. If properly followed, the glovebox and its components have been properly sterilized when left unused. If the log is left ambiguous in error, assume it was not properly cleaned and do so yourself.

Solvent System

1. Gloves are to used when operating the solvent system at all times. Sanitize the instrument with 70% iPrOH on the solvent you will be using.
2. After obtaining your solvent, all handles and touchable surfaces on the solvent system will be wiped down with a paper towel treated with a 70% solution of isopropanol, sanitize the pencil as well. **Note in the solvent log that this has been completed.**
3. Touchable surfaces include: the power switch on the vacuum pump, the colored handles on the solvent system, and the glass handles on the bulbs.
4. Direct additional questions about maintenance and sanitation of the solvent system to Michael Liang.

Rotary Evaporators

1. Sanitize the instrument with 70% iPrOH on the solvent you will be using. The instrument should always be used with gloves
2. The handles, dials, cold trap, and stopcocks will all be wiped down with isopropyl alcohol and paper towels at the end of each use

SFC/HPLC Protocol

1. Gloves are to be used when operating the Acquity UPC2 at all times.
2. At the end of a shift, all handles and touchable surfaces on the Acquity UPC2 will be wiped down with a paper towel treated with a 70% solution of isopropanol.
3. Touchable surfaces include: the power switch on the computer, the power switches of each compartment of the tower, the coverings on the keyboard and mouse.
4. Direct additional questions about maintenance and sanitation of the Acquity UPC2 to Joseph Zanghi and Emilie Wheatley

Cryobath Protocol

1. Gloves are to be used when operating the cryobath at all times.

2. At the end of a shift, all handles and touchable surfaces on the cryobath will be wiped down with a paper towel treated with a 70% solution of isopropanol.
3. Touchable surfaces include: the lid to the cryobath, the power switch.
4. Direct additional questions about maintenance and sanitation of the cryobath to Joseph Zanghi and Emilie Wheatley

Fridge/Freezer/chemical storage

1. All handles, cabinets, chemicals, etc. should be handled with gloves on at all times
2. Common surfaces should be wiped down with IPA at the end of each shift. Common surfaces include: handles, shared bench space, secondary containers, shared metal solvent drums, etc.

Dry Ice

1. Dry ice bin should be handled with gloves on at all times
2. Shared dry ice containers (i.e. rotavap blue cups) and shared large foam containers should be wiped (IPA) down at the end of each shift
3. shared dry ice bin, lid, and latches should be wiped down (IPA)
4. To reduce trips down the shared corridor if a large quantity of dry ice is needed the larger black foam container and lid should be used in place of multiple trips

- When will personnel wash and sanitize their hands while in lab?

  Hands should be washed immediately upon arrival to lab and immediately before leaving. Hands will be washed and sanitized hourly while on campus and always after talking with and/or handling material that was in contact with another individual.

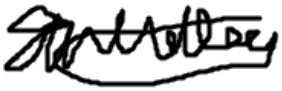
- What is your policy for wearing masks in lab?

  Workers will be required to wear masks at all times in lab and on campus during Phase 2.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I

encounter who is working under these difficult times.

Printed name	Signature	Date
Simon Meek		5/27/20
Joseph Zanghi		5/27/20
Justin Marcum		5/27
Tia Cervarich		5/27/20
Michael Liang		5/27/20
Emilie Wheatley		5/27/20
Hawa Keita		5/27/20
Miles Mason		5/27/20
Brock Swartz		5/27/20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Simon Meek		5/27/20

Meyer Group

Gerald Meyer Group Phase 2 Resumption of Research Operations

May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	8
# of postdocs	1
# of visiting scientists	1
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- *How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.*
  Our lab will be have three shifts (8 a.m. to 1:45 p.m., 2:15 p.m. to 8 p.m., and after 8:30 p.m.) to maintain ≤50% occupancy at all times. Our labs (Murray 2101, 2105, 2106, 2114, and 2405) are 22 feet by 30 feet, which allows two researchers per room to work while maintaining 200 square feet of distance. The maximal occupancy for each of these rooms is therefore two persons, and the appropriate signage will be posted on each door. Our labs with student desk space are Murray 2101, 2105, and 2106. Four student desks are present in each of these rooms. To ensure proper distancing, researches will sign up for work times only when students at an adjacent desk are not working (see attached floor plan). Work hours will be reserved on our shared lab calendar, and will be clearly color coded to indicate the hours when lab spaces are at maximal occupancy.

- *How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?*
  Upon returning to lab, commonly used instruments will all be moved to allow >9 feet of distancing. In cases where this is not possible, instruments that are less than 9 feet apart will not be used simultaneously. Color coding on the instrument sign up calendar will prevent simultaneous reservations of instruments that are not appropriately spaced. Note that the Chair has given us permission to place a UV-Vis spectrometer in Murray 2110 that will allow us to keep all of our high usage instruments > 9 feet apart.

- *Indicate the maximum occupancy for each room associated with your research program.*
  Each laboratory associated with the G. Meyer research group (Murray 2101, 2105, 2106, 2114, and 2405) is 22' by 30', or 660 square feet. The maximum occupancy of each room will therefore be capped at 2, allowing 200 square feet of distance between each occupant.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Include a plan and schedule for sanitization practices in your lab:

- *How often will surfaces be sanitized?*
  At the beginning and end of each work shift, common surfaces (door handles, desks, etc.) will be sanitized with either 70% ethanol or isopropanol. Squirt bottles with these sanitizing solutions will be appropriately placed for this purpose. Additionally, these surfaces will be sanitized each hour during the shift.

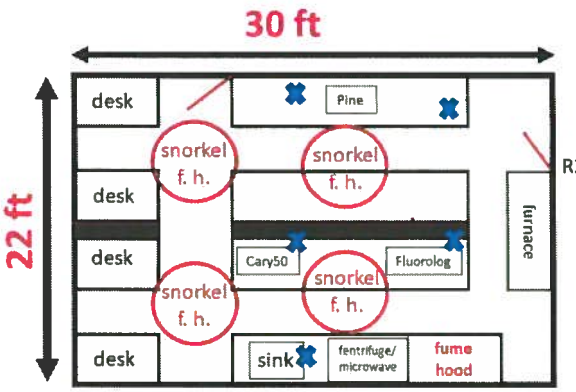
- *What is your protocol for sanitizing equipment?*
  Shared instrumentation (keyboards, etc.) will be sanitized before and after use, and covers will be purchased when possible. Procedures for sanitizing sensitive instrumentation will be posted next to the instrument.

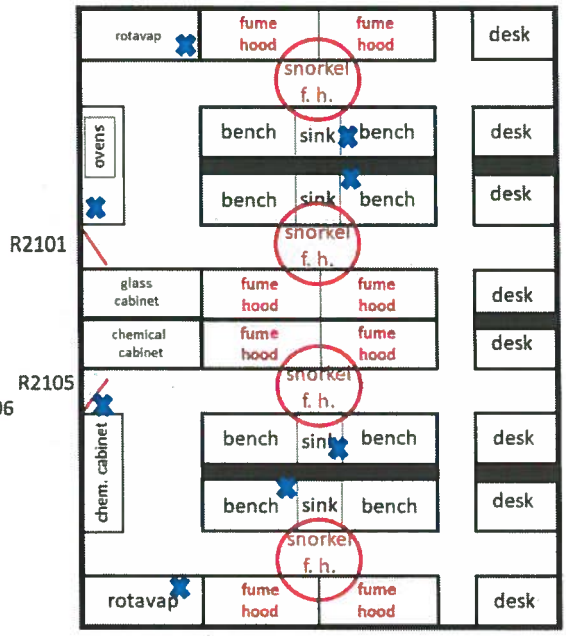
- *When will personnel wash and sanitize their hands while in lab?*
  Lab personnel will wash their hands hourly, when entering or exiting a building or lab, and before and after handling their mask.

What is your policy for wearing masks in lab?
Masks must be worn at all times in shared spaces and inside buildings, except when eating. However, we encourage eating outside whenever possible.

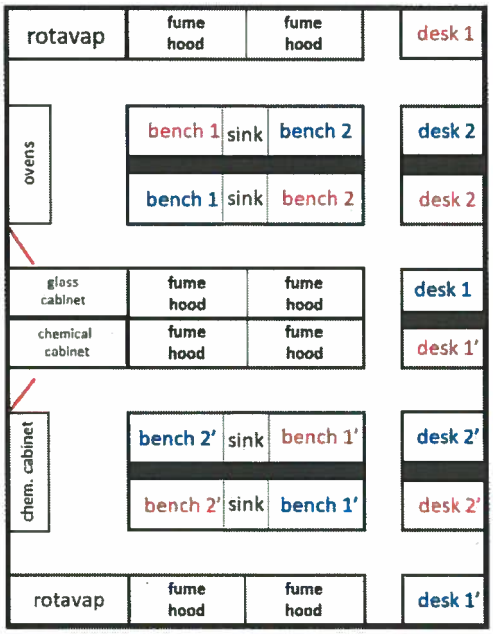
On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

- 660 sq ft rooms
- 50% max desk occupancy = 2 people per room
- Blue crosses indicate the spots where wash bottles containing 75% isopropanol can be found, in particular next to the doors and sinks.



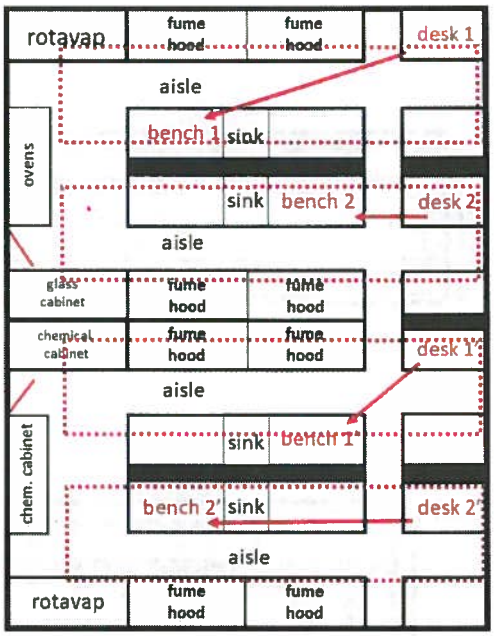


- ✓ Color code represents desk occupation on a given shift
- ✓ desks and benches exclusively for a unique user
- ✓ Color code represents desk occupation during a given shift (ex. red: 8 a.m. to 1:45 p.m., blue: 2:15 p.m. to 8 p.m.)
- ✓ Number code links each desk user with its own and exclusive bench within the same room.



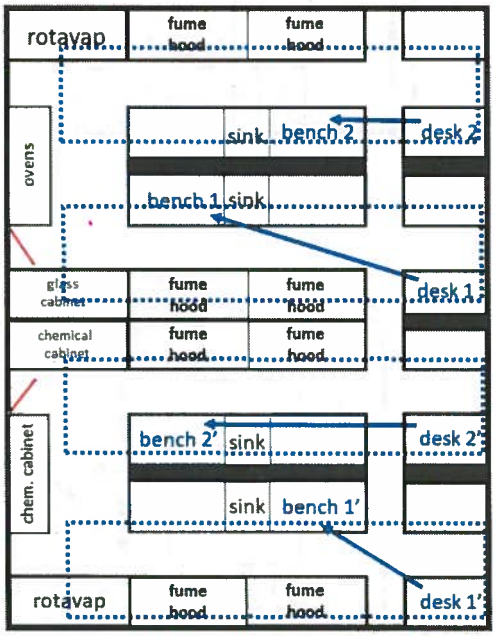
Shift 1: 8 a.m. to 1:45 p.m.

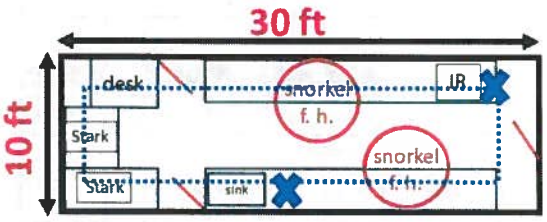
- ✓ This plan allows each user to safely work either on his/her desk or bench while mantaining the maximum distance possible, which at all times will exceed the 6 ft minimum.
- ✓ Each dotted rectangle represents the 200 sq ft area requirement for social distancing, less than 1/3 of the total area of the room (660 sq ft).



Shift 2: 2:15 p.m. to 8 p.m.

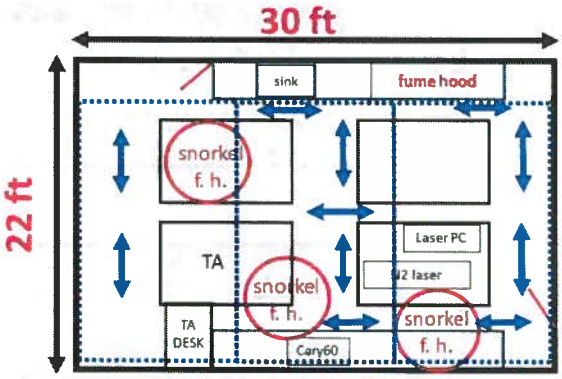
- ✓ This plan allows each user to safely work either on his/her desk or bench while mantaining the maximum distance possible, which at all times will exceed the 6 ft minimum.
- ✓ Each dotted rectangle represents the 200 sq ft area requirement for social distancing, less than 1/3 of the total area of the room (660 sq ft).





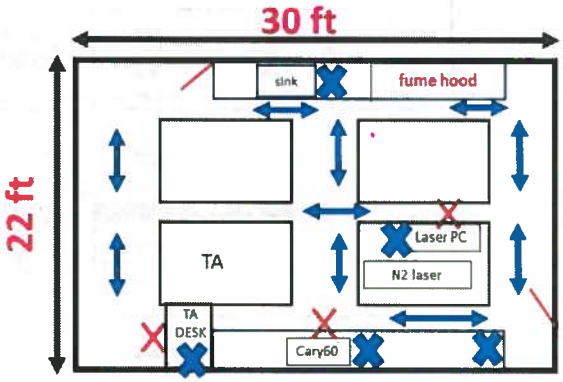
R2114

- ✓ Only one person will be able to use R2114.



R2405

- ✓ Three instruments are located in room R2405 (TA, pulsed N_2 laser and a Cary 60 UV-vis), arranged in a way that the 200 sq ft area spacing requirements are met.
- ✓ The four rectangles in black each represent an optical table.
- ✓ Physical access to each instrument can be done using one of the three aisles available (blue arrows). The person entering/leaving the room will proceed according to the current lab and/or instrument occupancy.



2405

- ✓ Blue crosses mark the spots where iPrOH squirt bottles can be found (sink, main door and next to each instrument
- ✓ Red crosses show where each instrument user will be standing while in lab.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Bruno M. Aramburu-Troselj	Bruno M. Aramburu-Troselj (May 27, 2020 17:44 EDT)	May 27, 2020
Andrew Maurer	Andrew Maurer (May 27, 2020 17:39 EDT)	May 27, 2020
Rachel Bangle	Rachel Bangle (May 28, 2020 10:19 EDT)	May 28, 2020
Michael Turlington	Michael Turlington (May 27, 2020 17:07 EDT)	May 27, 2020
Daniel Conroy	Daniel Conroy (May 27, 2020 17:14 EDT)	May 27, 2020
Alexander Deetz	Alexander Deetz (May 27, 2020 15:16 MDT)	May 27, 2020
Tashii Brown	Tashii Brown (May 27, 2020 17:40 EDT)	May 27, 2020
Erin Kober	Erin Kober (May 27, 2020 22:28 EDT)	May 27, 2020
Quentin Loague	Quentin Loague (May 27, 2020 17:11 EDT)	May 27, 2020
Jake Sirlin	Jake Sirlin (May 28, 2020 11:49 EDT)	May 28, 2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Gerald J. Meyer	Gerald J. Meyer	5/27/2020

Miller Group

Last updated: July 8, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	9
# of postdocs	3
# of visiting scientists	1
# of undergraduate researchers	4

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  Each shift will contain 6 people. Shifts will last one week (current plan: start Saturday morning, end Friday evening). Attendance will be logged through Google Calendars. Undergraduates will not be permitted to work during Phase 2.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

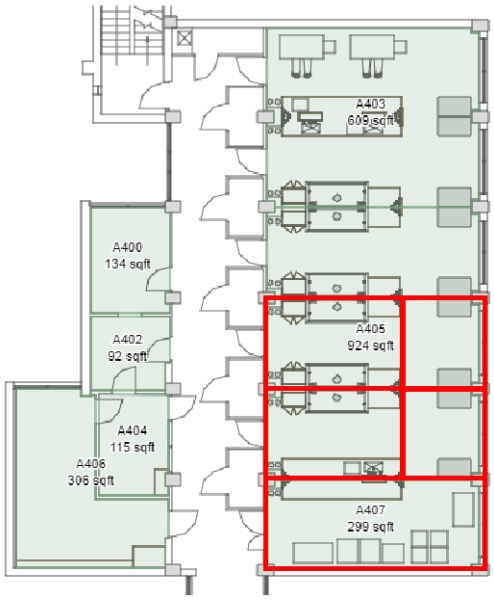
  Instruments in close proximity will not be used simultaneously. Work at specific instruments or workstations will be staggered appropriately and organized using a shared online calendar system.

- Indicate the maximum occupancy for each room associated with your research program.

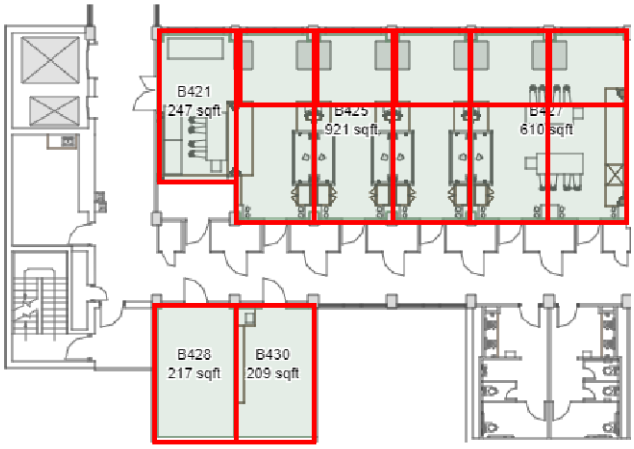
  Kenan B421: 8 people
  Kenan A407: 4 people
  Kenan B428: 1 person
  Kenan B430: 1 person

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Kenan 4th A tower



Kenan 4th B tower



= 1 person per each boxed area

Please note that the back-to-back desk carrels have solid walls between them. Only one researcher will be in the space between two desks per shift.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

  Surfaces will be sanitized at the start and end of each work day, and at least four times in between.

- What is your protocol for sanitizing equipment?

  Glovebox gloves and faceplates will be wiped down with IPA **before and after use**. Lab computers (keyboard/mouse) will be wiped down with IPA **before and after use**. All other equipment requires gloves and full PPE for normal use.

- When will personnel wash and sanitize their hands while in lab?

  When arriving, before leaving, and at least once an hour during shifts.

- What is your policy for wearing masks in lab?

  Masks are required at all times. 100% cotton or flame-resistant fabric masks will be worn. When working at a bench or fume hood with flammable materials, a face shield will also be worn. Any mask that is believed to have been contaminated with chemicals will be properly discarded.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Changho Yoo	Electronic signature	5/28/20
Tianfei Liu	Electronic signature	5/29/20
Drew Cunningham	Electronic signature	5/28/20
Andrew Camp	Electronic signature	5/28/20
Quinton Bruch	Electronic signature	5/28/20
Bethany Stratakes	Electronic signature	5/28/20
Henry Dodge	Electronic signature	5/28/20
Eric Assaf	Electronic signature	5/28/20
Sebastian Acosta-Calle	Electronic signature	5/29/20
Noah McMillion	Electronic signature	5/29/20
Isaac Cloward	Electronic signature	5/29/20
Allison Smith	Electronic signature	5/28/20
Dean Bass	Electronic signature	7/8/20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Alexander Miller	Electronic signature	5/29/20

Moran Group

Andrew Moran Group Phase 2 Resumption of Research Operations

Last updated: May 31, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	3
# of postdocs	0
# of visiting scientists	0
# of undergraduate researchers	0

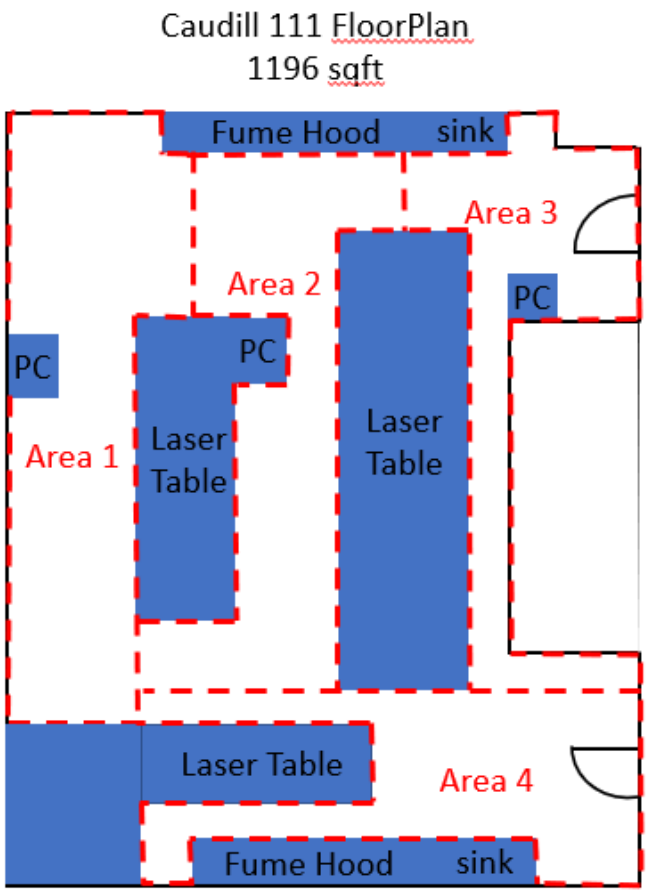
Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas. We request permission to conduct research with three graduate students present. Our three graduate students conduct experiments in a laboratory that is 1200 ft^2. We can satisfy the >200 ft^2/person safety guideline with all students present. The laboratory has two entrances so we will be able to keep appropriate distance when entering and leaving lab. Sinks are located near each door for washing hands. In addition, it is not safe for the students to operate our amplified laser system alone. Students will log arrival and departure times in a group spreadsheet.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments? Social distancing guidelines can be met at all locations in our laboratory. Students will walk around tables etc. to maintain appropriate distances.

- Indicate the maximum occupancy for each room associated with your research program. Caudill 111 is 1196 square feet. The maximum occupancy is 4 people with social distancing.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.



Each student in lab will work at different area to maintain 8' distance.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized? Surfaces will be sanitized with 70% ethyl alcohol before and after use. Frequently touched surfaces such as door knobs and light switches will be sanitized four times during the day in addition to when students arrive and depart lab.

- What is your protocol for sanitizing equipment? Surfaces will be cleaned with ethyl alcohol before and after use. We will purchase a keyboard cover to facilitate cleaning.

- When will personnel wash and sanitize their hands while in lab? Personnel will wash their hands hourly in addition to when entering and departing lab. Caudill 111 is equipped with a sink for washing hands.

What is your policy for wearing masks in lab? Masks will be worn in lab. Students will abide by the same rules in both public spaces and lab.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name Signature Date

Ninghao Zhou

5/26/20

Zhenyu Ouyang

5/28/20.

Meredith McNamee

5/26/20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name Andrew Moran Signature Date 5/30/20

Nicewicz Group

[Nicewicz] Group Phase 2 Resumption of Research Operations

Last updated: May 27, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	9
# of postdocs	1
# of visiting scientists	0
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

We will be running the lab with only 5 students present at a time with a three day on/three day off rotating schedule. We will log worker attendance using a google sheet. Workers will pre-arrange their arrival/departure times using this google sheet.

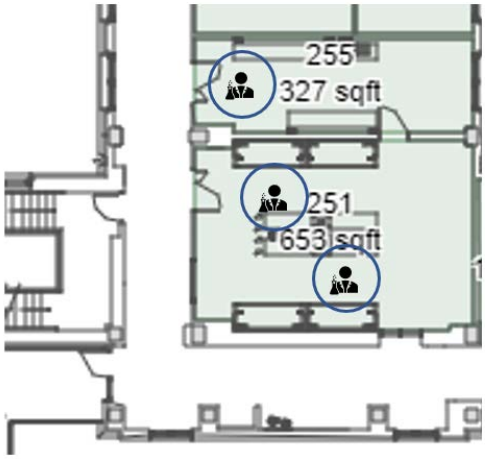
- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

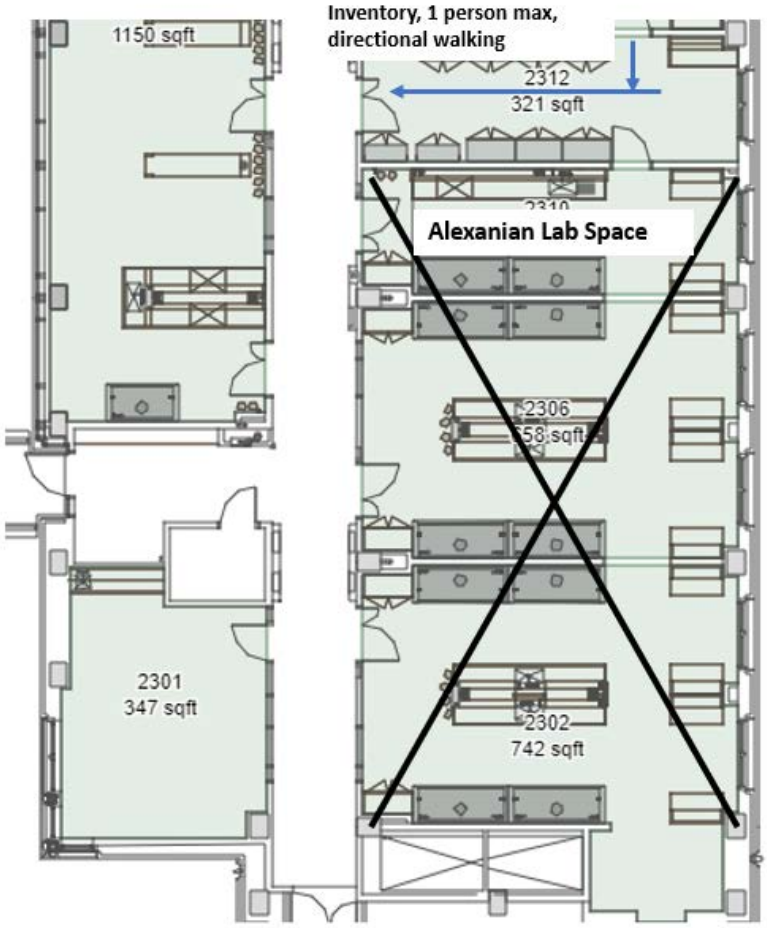
Lab members will need to maintain physical distancing while working, only one student may use an instrument at a time. A reservation system via google docs may be utilized in order to ensure staggering of student usage. All instruments are physically distanced so they are greater than 6 feet apart.

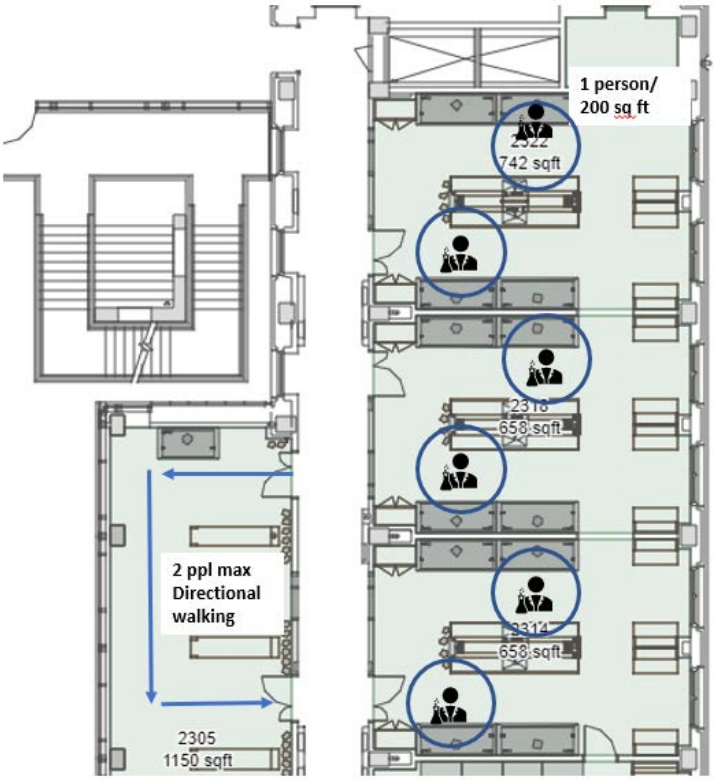
- Indicate the maximum occupancy for each room associated with your research program.

Venable 2322, 2318, 2314, 2312, 2305 and Caudill 251 each have a maximum occupancy of 2 people per room. Caudill 255 has a maximum occupancy of 1. This maintains a 200 square feet distance (6 ft social distance + 2ft person width) from each other while working.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.


255
327 sqft
251
653 sqft


Inventory, 1 person max, directional walking
1150 sqft
2312
321 sqft
Alexanian Lab Space
2306
358 sqft
2301
347 sqft
2302
742 sqft



Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

Lab surfaces and high touch areas within lab should be sanitized using ≥70% EtOH or IPA solution immediately before and after use and at least four times while at work. Thorough surface cleaning will be performed at the beginning and end of a shift. These surfaces include, but are not limited to, door handles, sink faucets, fridge/shared space, computer keyboards and mice.

- What is your protocol for sanitizing equipment?

Shared equipment (i.e. glovebox gloves and glass, balances, rotary evaporators, inventory computer) will be sanitized before and after use using using ≥70% EtOH or IPA solution.

- When will personnel wash and sanitize their hands while in lab?

Personnel are required to wash and/or sanitize hands hourly, when entering and exiting a building, lab, office and/or hallway, and before/after handling your mask.

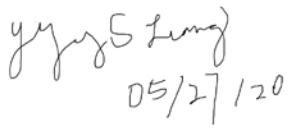
- What is your policy for wearing masks in lab?

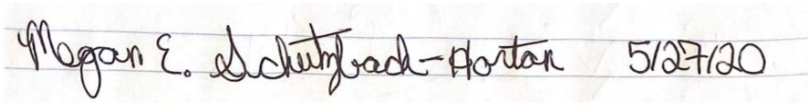
Masks should be worn at all times while in lab. Should a mask become contaminated by chemicals, it should be disposed and replaced immediately.

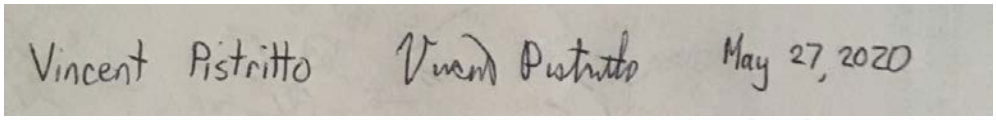
By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

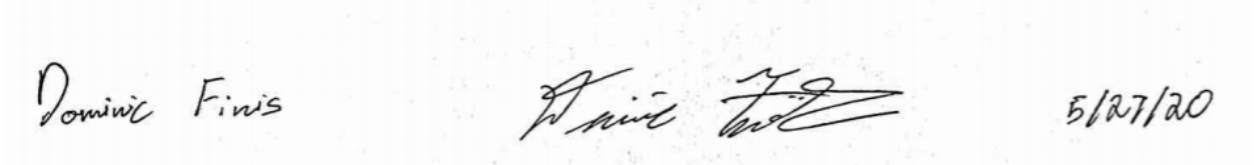
Printed name Signature Date

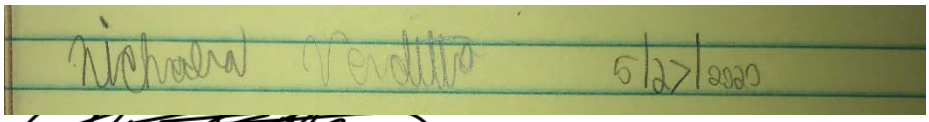
Marcel Schlegel  5/27/20

Yigang Susanna Liang  5/27/20

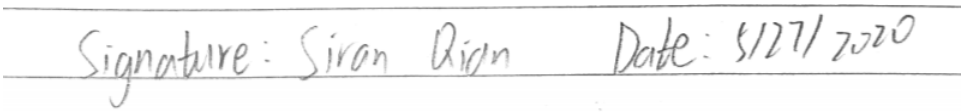
Megan Shutzbach-Horton 

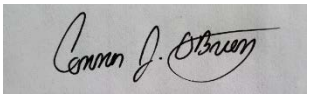


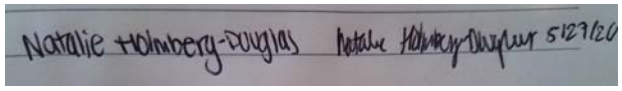


Nicholas Venditto 

Nicholas Onuska  5/27/20

Siran Qian 

Connor O'Brien  5/27/20



By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name Signature Date

David Nicewicz 

Papanikolas Group

PAPANIKOLAS Group Phase 2 Resumption of Research Operations

Last updated: May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	5
# of postdocs	0
# of visiting scientists	0
# of undergraduate researchers	1

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  Personnel: The six people in the group have varying levels of expertise. **Jason Malizia** is the most experienced. He has extensive knowledge about multiple instruments and has encountered many of typical (and atypical) problems. **Leah Bowers, Sarah Sutton** and **Cullen Walsh** can work independently on at least one instrument, but must consult with more experienced students when major and/or new problems are encountered. **Supraja Chittari** and **Alexis Glaudin** are new to the group and have no knowledge of the instrumentation. They cannot yet work independently.

  Maintaining Reduced Operating Capacity: Access to each instrument will be granted in one-week shifts. Shifts will rotate on a weekly basis (Monday-Saturday). Each week three people will be allowed access to use the instruments as follows:

  - **Jason Malizia** will be granted access for each shift. Jason has the most knowledge about the instrumentation. He is the most able to aid others as they trouble-shoot problems they have not yet experienced. In addition, his presence in lab is needed in the event of an unexpected problem or equipment failure to ensure both the safety of other lab personnel and also the equipment.
  - During each shift, two of the following students (**Sarah Sutton**, **Cullen Walsh**, **Leah Bowers**, **Supraja Chittari**) will be allowed access. Once undergraduates are allowed access by the University, **Alexis Glaudin** will also be considered for one of these two slots.
  - When not physically on campus, lab personnel will continue their work from home.

  Logs: A log of personnel present in lab will be kept in a shared network folder. Each lab member will record date, in/out time. Visitors to the lab will also be noted.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  Under most circumstances, only one person will be working on an instrument at a time. When this is the case, social distancing guidelines will be met through a combination of physical barriers and physical separation between work areas.

Social distancing will not be possible when two people are working on the same instrument for troubleshooting purposes, or training. During these sessions the following should be considered:

- Use remote interaction tools such as Zoom and remote desktop (i.e. team viewer) whenever possible to problem solve and/or convey advice.
- If remote interaction is not possible or not appropriate, then the following guidelines apply:
  - Wear gloves in addition to mask (which are always required.)
  - Divide tasks (e.g. running software and instrument manipulation) to minimize potential exposure through contaminated surfaces.
  - Sanitize surfaces as described below before and after each session.

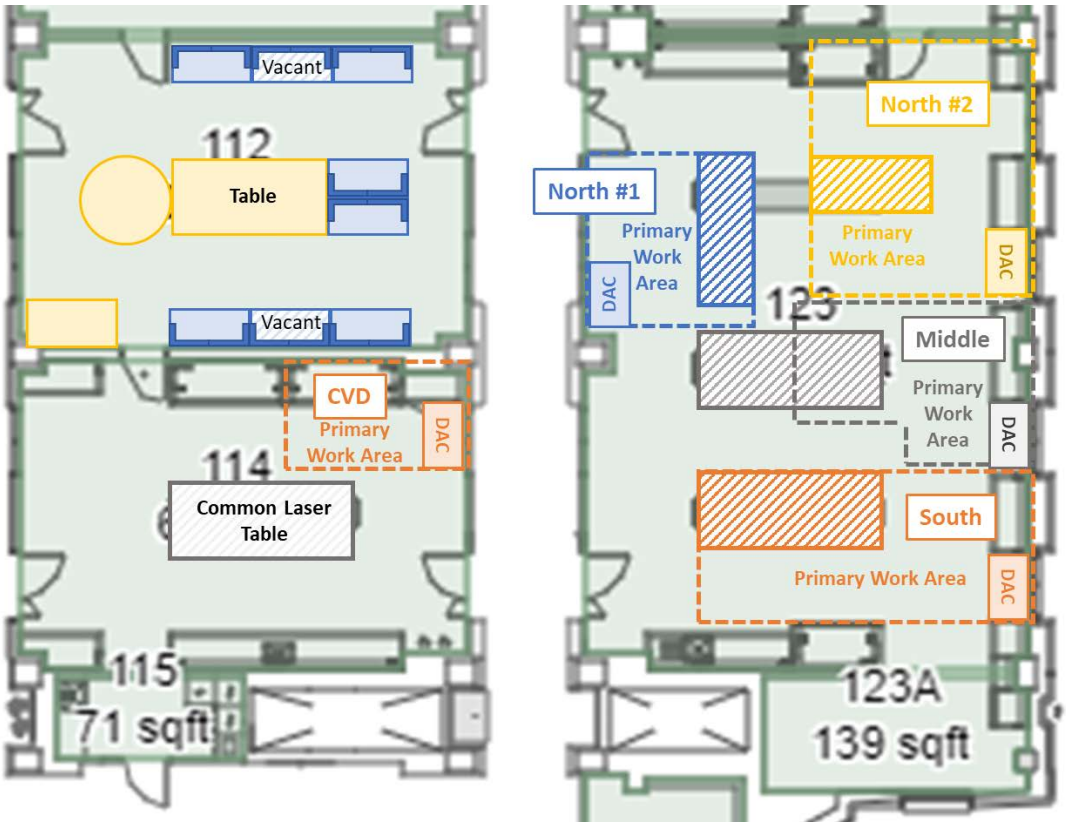
- Indicate the maximum occupancy for each room associated with your research program.

  - Caudill 123 (1310 sqft): 4
  - Caudill 112 (650 sqft): 2
  - Caudill 114 (645 sqft): 2

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

  Instrumentation: The laboratory's primary instruments include four laser-based instruments and one CVD system. A floorplan showing the locations of these instruments is attached. Pertinent details regarding these instruments are as follows:

Designation	Description	Location	Comment
North #1	Pump-probe Microscope	Ca 123 (North End)	Each instrument is constructed from a laser system and optical components arranged on a **laser table.** These components are contained in a plexiglass box with removable panels. The box covers the entire laser table, which is also surrounded by a plastic curtain enclosure and HEPA filter system that removes dust and other particulates in the air above the table. Each instrument also has **associated electronics** and a **data acquisition computer**.
North #2	Photoemission Microscope	Ca 123 (North End)	
Middle	fs-Transient Absorption	Ca 123 (Middle)	
South	Pump-probe Microscope; Time-resolve emission	Ca 123 (South End)	
CVD	Chemical-Vapor Deposition	Ca 114 (Right Hood)	The CVD system is located in a hood and ventilated cabinet and a computer that sits outside of the ventilated space.



Laboratory Diagram

The laboratory space has been divided into **PRIMARY WORK AREAS** and **TRANSITION AREAS**. The function/use of these spaces is as follows:

- **Primary Work Areas**: The primary work area for each instrument comprises the space needed to conduct experiments under normal circumstances. This area includes the side of the laser table accessed most often, electronics racks and data acquisition computer. These areas are indicated for each instrument on attached floor diagram.
  - Primary work areas will be indicated on the laboratory floor with tape.
  - Simultaneous operation of instruments will be allowed if their primary use areas are separated by more than 8 ft (at closest point) and/or there is a physical partition between them. Based on these criteria, allowed simultaneous operation of the laboratory instruments is as follows:
    - Experiments can be performed simultaneously using the NORTH #1, NORTH #2 and SOUTH instruments.
    - When the MIDDLE instrument is in operation, work cannot be performed on NORTH #2 or SOUTH instrument, and vice versa.
    - The CVD instrument is in a separate laboratory space and can be used simultaneously with any of the other four.
  - Lab personnel who are conducting experiments on a particular instrument are considered the owner of its primary work area.
    - As a general rule, only lab personnel working on an instrument can be in this area while it is being used.
    - If access to shared storage locations (e.g. alcove, optics cabinets) requires passage through another's primary work area, one must first ask permission to enter the zone, and then movements should be coordinated to allow proper distancing.

- Lab personnel should enter and exit the lab through the door that is closest to their primary work area. For NORTH #1 and NORTH #2 this is the north door. For SOUTH and MIDDLE, this is the south door.

- **Transition Areas**: All other areas in the lab will be considered *transition areas*.
  - Lab personnel should coordinate their movements when passing through transition areas to minimize interaction time and maintain 8 ft separation.
  - If extended access to a transition area is needed (e.g. to service/align a laser), new primary work areas will be defined. If this occurs, it will be communicated to others in the lab using the group Zoom chat channel.

- **Office Area:** Desk space for laboratory personnel is housed in Ca 112. Per Departmental/University guidance, only one person will be allowed in the office at a time. While use of the office is acceptable while waiting for experiments to finish, no one should come to campus just to work in the office.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
  - High-use surfaces (i.e. door knobs, light switches) will be sanitized every two hours per Departmental/University guidance.
  - Shared surfaces in labs (i.e. counter tops, storage cabinet tops, storage cabinet handles) will be sanitized daily and after each use. These surfaces will not be used to store items.
  - Common surfaces in the office space (i.e. conference table, work tables) that are used less often will be sanitized daily and after each use.

- What is your protocol for sanitizing equipment?

  Laser Table: Cleaners or sanitizers (e.g. IPA) should *not* be used on any of the optical components contained on the laser table, as it could result in damage of the component and/or misalignment of the instrument. In order to prevent contamination of these surfaces:
  - Hands will be washed/sanitized before moving, removing, or manipulating either the curtains surrounding the table or the panels on the plexiglass enclosure.
  - Hands will be washed/sanitized before working with any optical component contained within the plexiglass enclosure surrounding an instrument.

  Electronics: Care must be taken in sanitizing delicate electronics equipment, as solvents can cause significant damage.
  - Electronics in the primary work area of each instrument should be sanitized at the start and end of each 1-week block. Since the instruments are dedicated-use during that time, sanitizing during this time will be at user discretion.
  - Commonly used electronics cable connectors and cables should be sanitized with IPA/paper towel.
  - Electronics instrumentation (i.e. scopes, lock-in amplifiers, etc.) should be sanitized using IPA/paper towel at start of each day.
    - Do not wipe down display screens on scopes, or numerical displays, as there is a possibility that IPA can damage the readout. Thus, one should avoid touching screens/readouts.
    - Only use 70% IPA strength; stronger could damage surfaces.
    - Do not use ethanol or methanol as a substitute, as it can damage the plastic.
  - Computer keyboard/mouse will be sanitized at start of each work session by wiping with IPA/towel.

- When will personnel wash and sanitize their hands while in lab?
  - ❖ Hands will be washed at beginning of each day before working in lab.
  - ❖ Hands will be washed hourly per Departmental/University guidance.
  - ❖ When working with certain equipment, hands will be washed/sanitized as specified above.

What is your policy for wearing masks in lab?

All laboratory personnel will wear standard 3-ply masks provided the university at all times in lab. Since we are not working with hazardous material, we anticipate that masks can be reused several days before being replaced.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

Ramsey Group

[J.M. Ramsey] Group Phase 2 Resumption of Research Operations

Last updated: June 23, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	1
# of postdocs	2
# of visiting scientists	0
# of staff scientist/engineers	10
# of technicians	4
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  We will use a group calendar indicating when individuals are planning experiments on campus and in which room they will be working. Room capacity numbers will be posted at the entrance of each lab. There is currently no restriction on the length or timing of a shift. If a room is booked above the indicated capacity, per below, and during the intended time they want to work, they will have to find another time or place for their experiments. Group members are responsible for logging their on-campus work hours each week and submitting them to Kelli Cole and J.M. Ramsey.

  For training purposes, we are proposing the following dependent on the instrument/equipment that the new personnel need training on:

  1. Use zoom for non-instrumentation training
  2. Use web cam or video feed for instruments where 6 ft separation distance is not feasible
  3. Maintain 6 ft of separation for instrument training where training at that distance is feasible
  4. Create a barrier between the trainer and trainee at the instrument where being at the instrument is necessary.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  Social distances are expanded in our primary laboratory, Chapman 050, by placing plastic barriers along the center long axis of optical tables/work benches. Spaces that are occupied to capacity by individuals, cannot be entered until that space drops below capacity. We do not have multiple workers needing single pieces of equipment.

- Indicate the maximum occupancy for each room associated with your research program.

Chapman 030B: 1
Chapman 032: 4 Will only be used briefly when on campus for experiments
Chapman 034: 1
Chapman 050: 8
Chapman 102: 1
Chapman 104: 1
Chapman 411: 2
Phillips 101: 1
Phillips 103A: 1
Caudill 011: 3
Caudill 014: 1
Caudill 007B: 1
Caudill 107B: 1
Caudill 110: 1 (No floor plan attached as only 1 group member will use this space) Will only be used briefly when on campus for experiments

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

  See attached floor plans

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

  Workspace surfaces including instruments in use will be sanitized at the beginning and end of each shift. Surfaces will be cleaned every 2 hours if they have been used or when work at that area has been completed.

- What is your protocol for sanitizing equipment?

  Surfaces will be sanitized using ≥ 70% ETOH or IPA solutions. Surfaces will be sprayed and wiped after use.

- When will personnel wash and sanitize their hands while in lab?

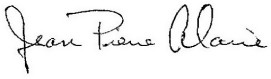
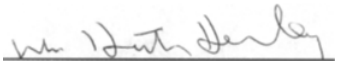
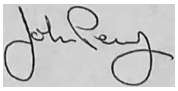
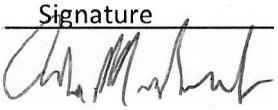
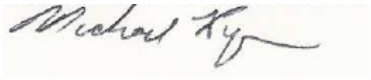
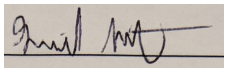
  Personnel will wash their hands once every hour. In Chapman 050, personnel will wash or sanitize their hands when moving from one bay to another. Personnel will wash and/or sanitize their hands when leaving or entering the laboratory.

What is your policy for wearing masks in lab?

All individuals working in laboratories when others are present must wear a mask. Masks will need to be worn at all times, even if no one else is present in lab. The only exception is if someone is in a personal office with the door closed.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

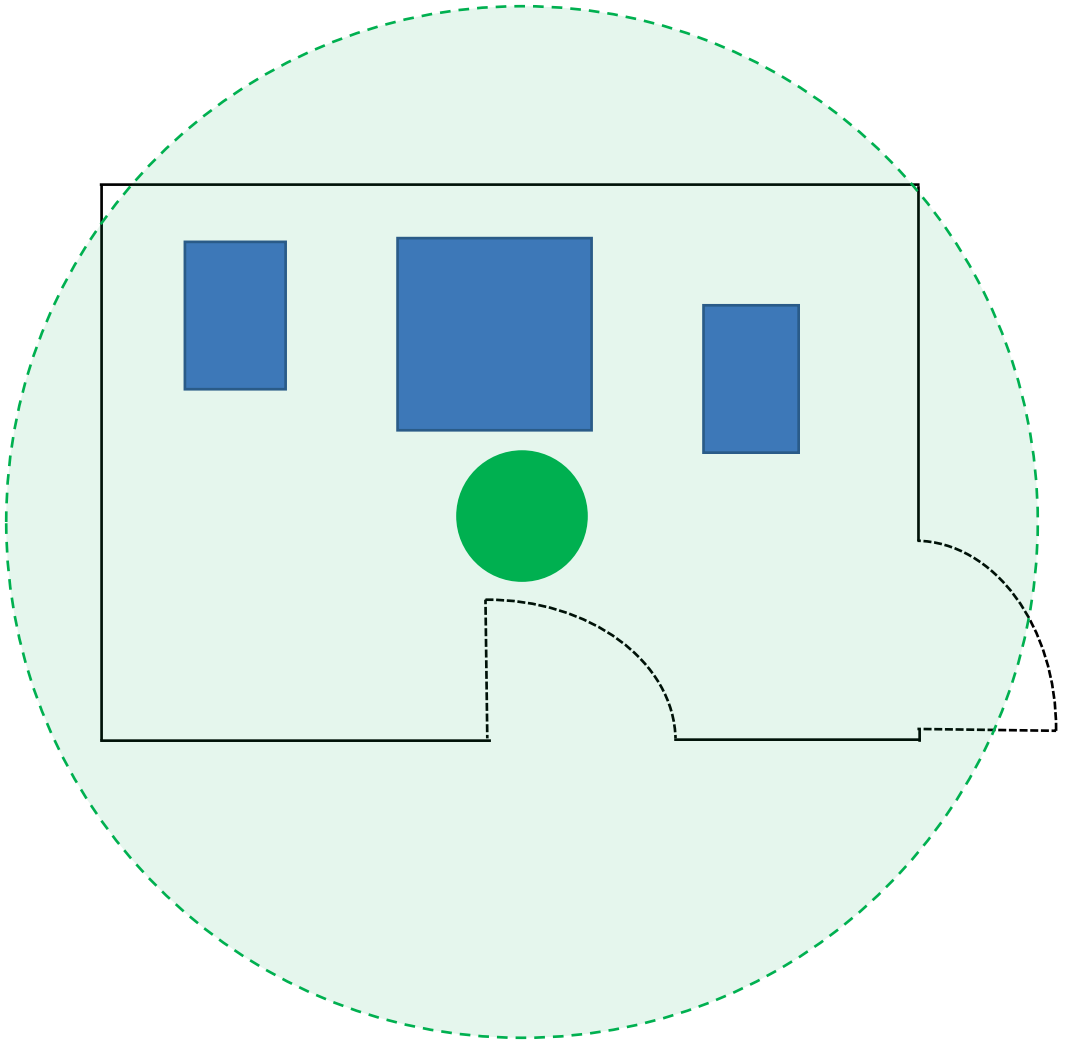
By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Jean Pierre Alarie		5/29/20
William Henley		5/29/20
John Perry		5/31/20
Yury Desyaterik		5/29/30
David Thrower		5/29/20
Angie Proctor		5/29/20
Andrew Hoerter		5/29/20
Michael Pynn		5/29/20
David Korest		6/01/20
Kelli Cole		5/31/20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

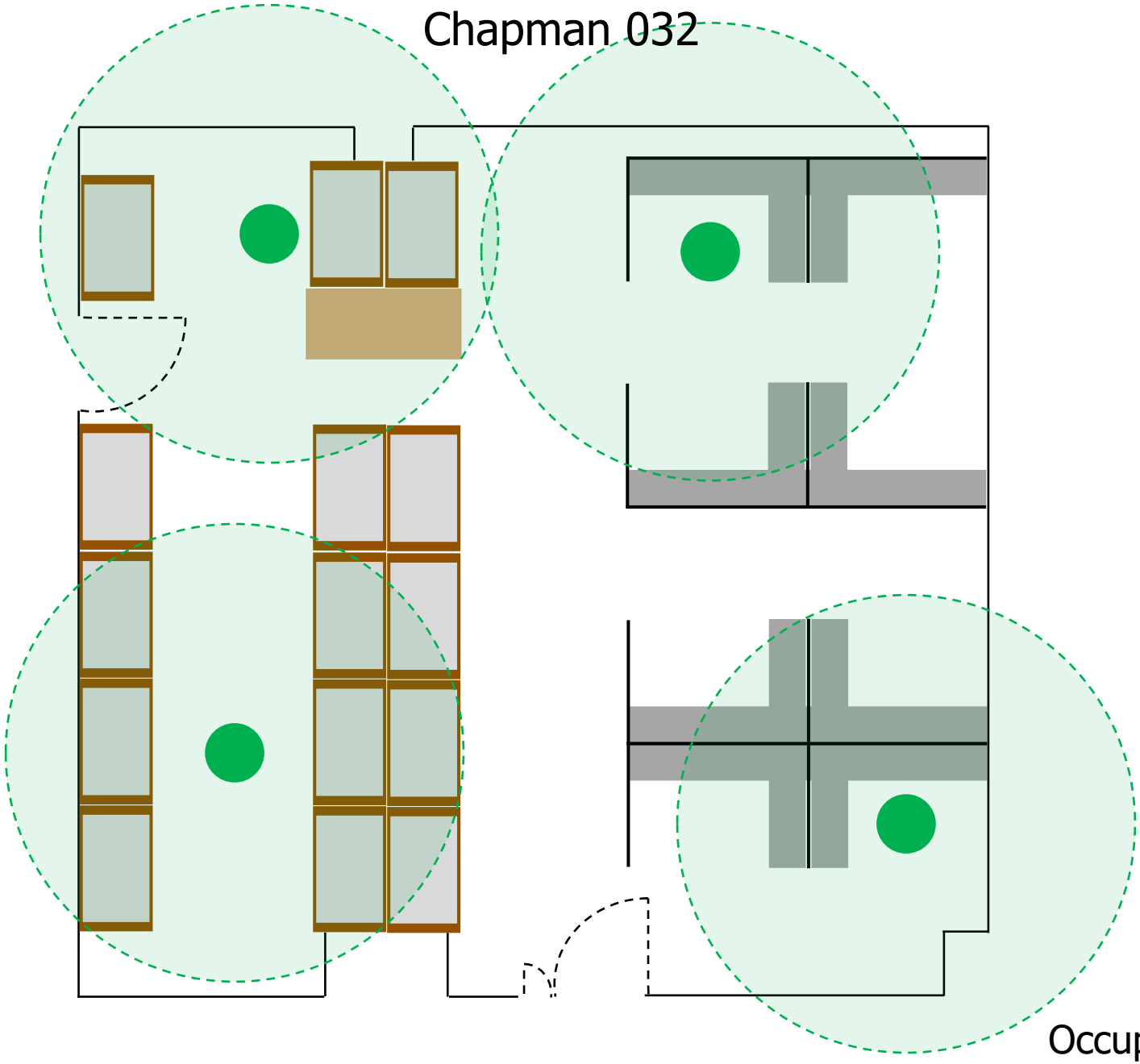
Printed name	Signature	Date
J. Michael Ramsey		May 29, 2020

Chapman 030B



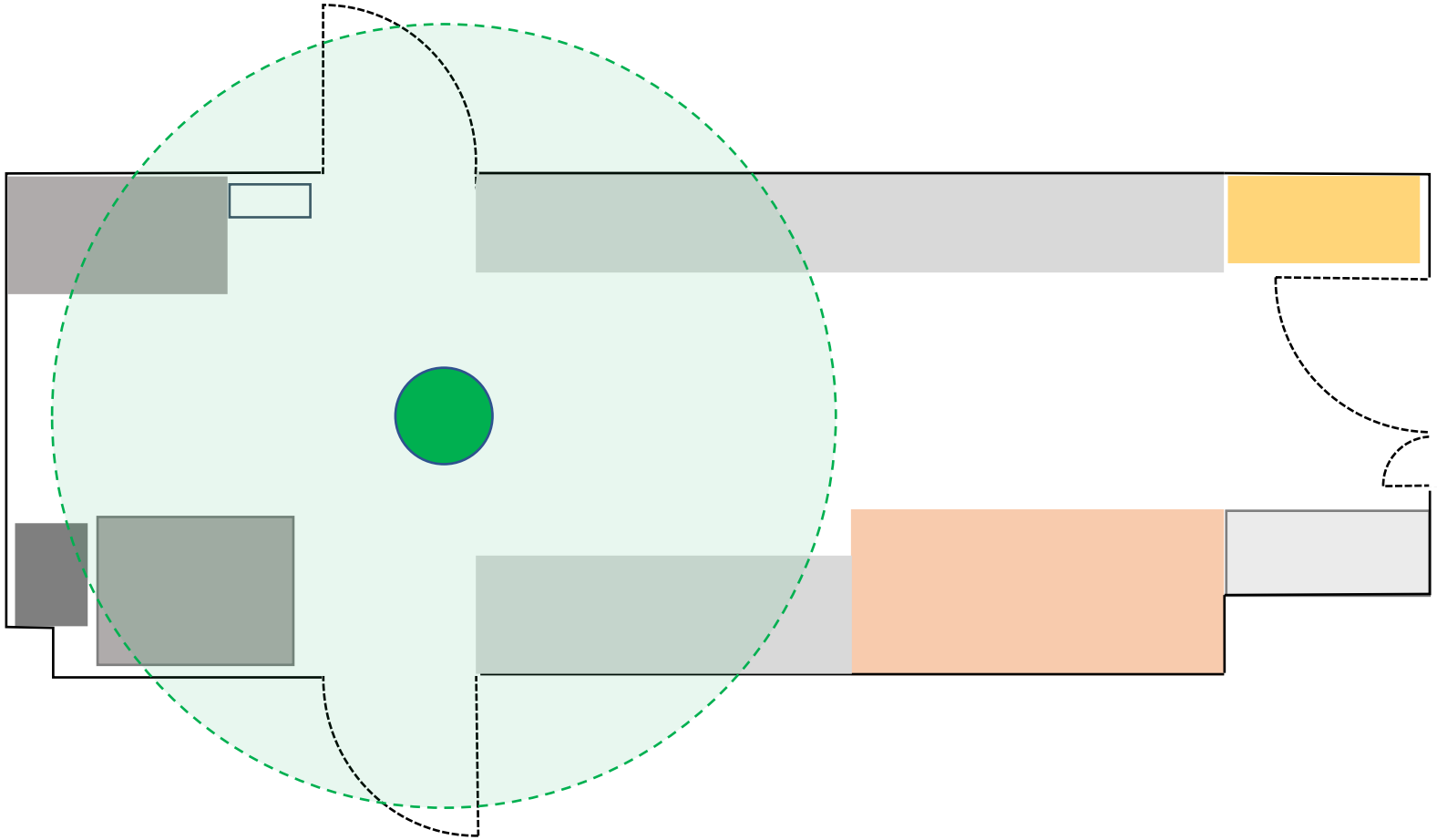
Occupancy: 1

Chapman 032



Occupancy: 4

Chapman 034

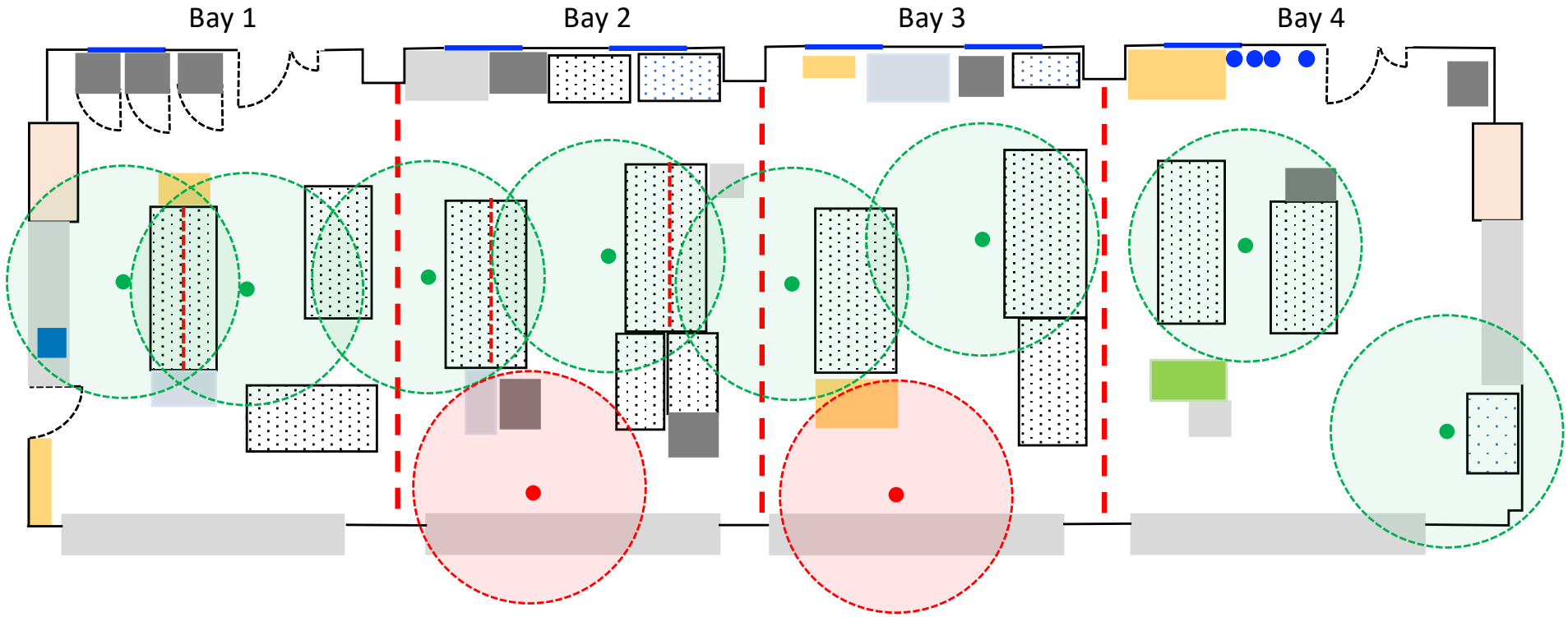


Occupancy: 1

Bold indicates primary work area in the lab.

Updated
Chapman 050

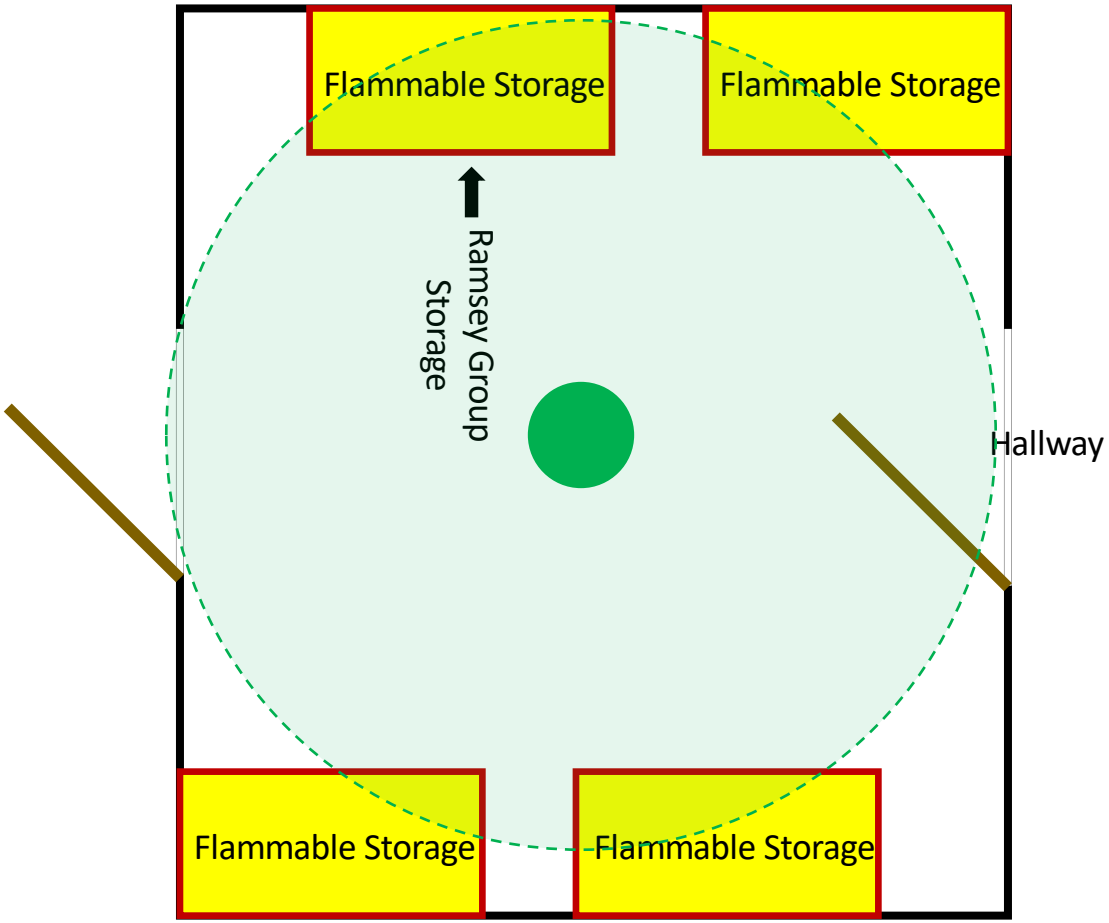
Red dashed lines indicate barriers
Green Circles with green dots indicate 8 ft social distance
Red Circles with red dot – new personnel.



Occupancy: 10

Chapman 102

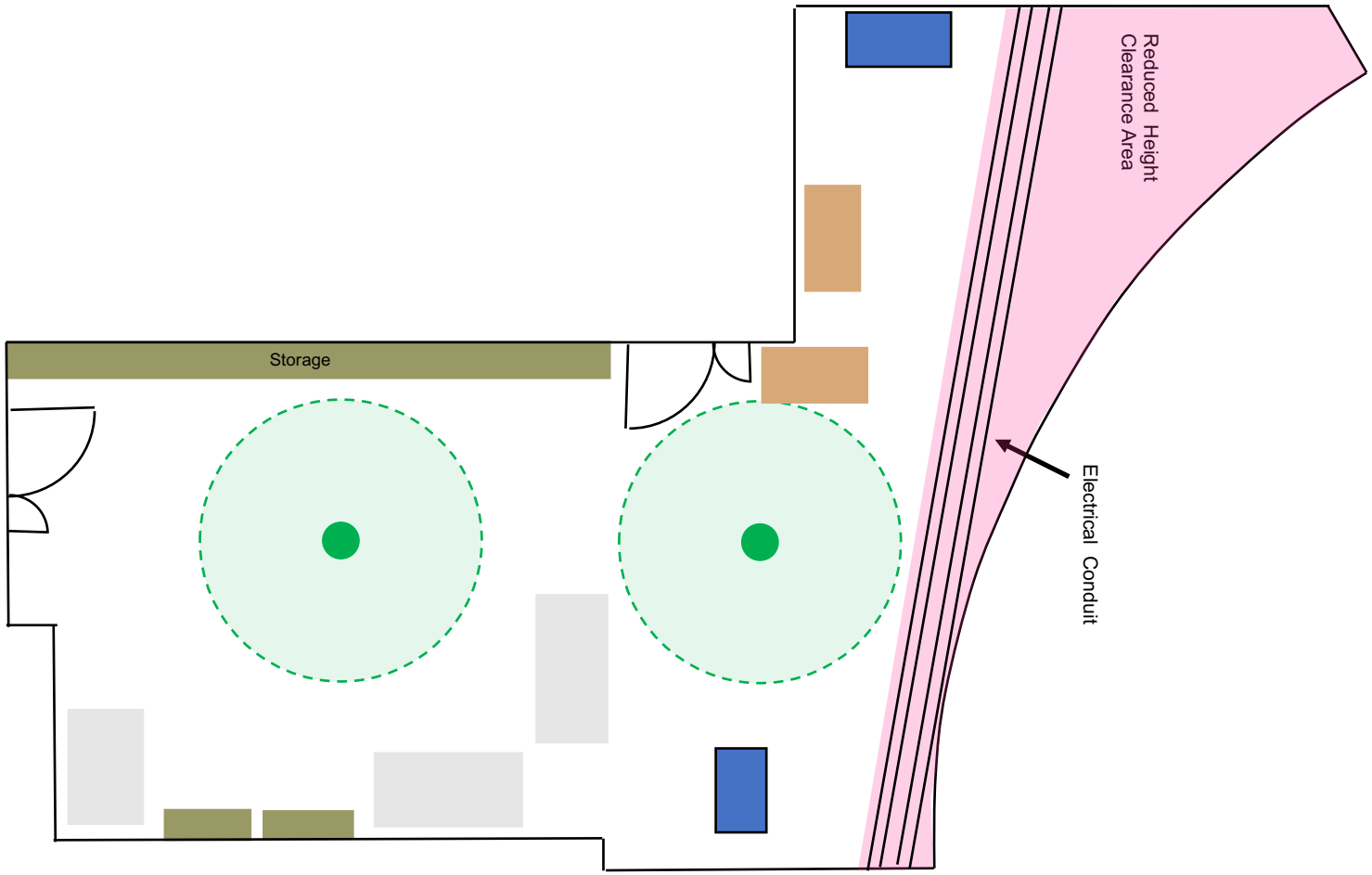
Flammable storage area. Only 1 person at a time will enter



Occupancy: 1

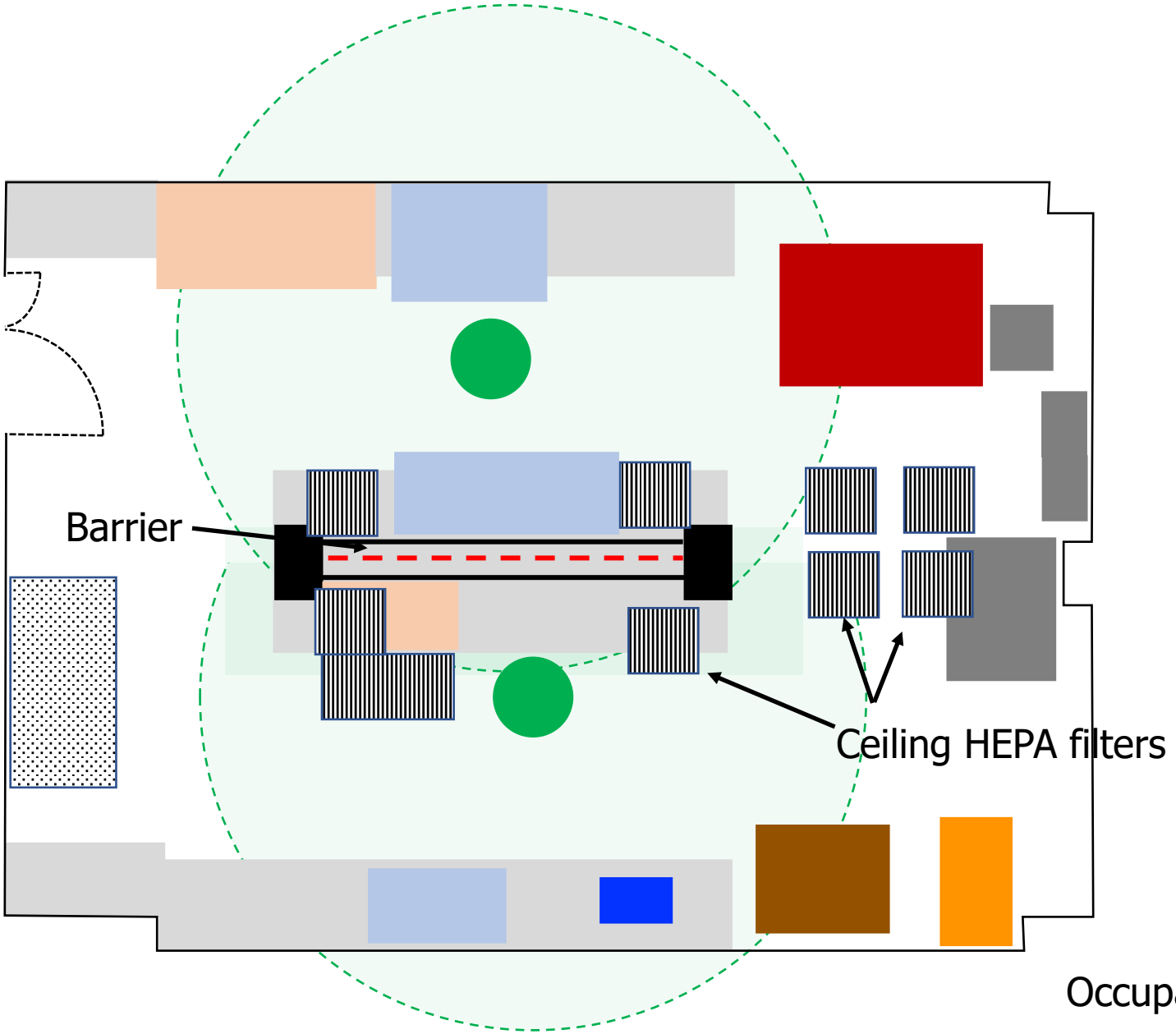
Chapman 104

Storage area. Only 1 person at a time will enter



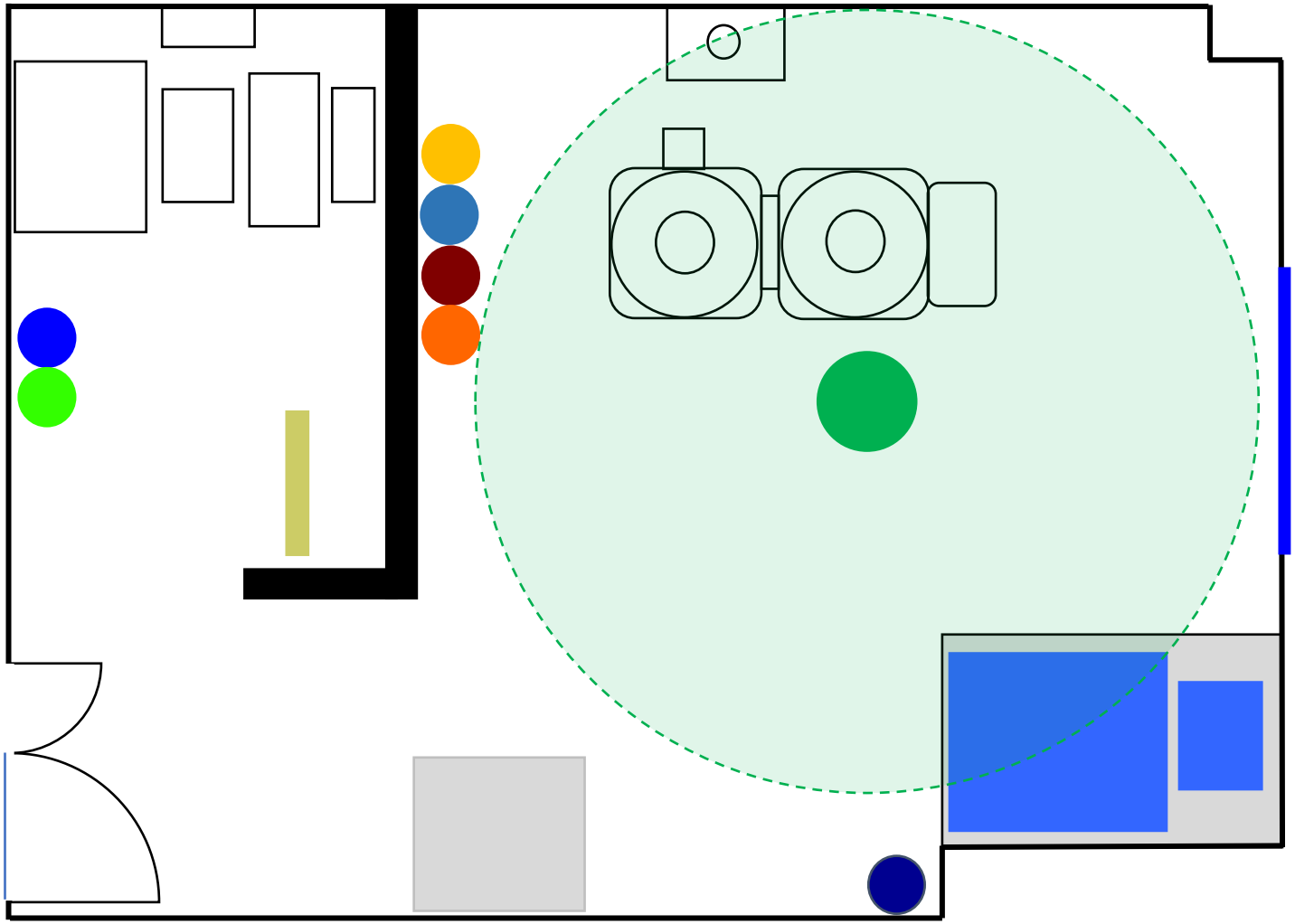
Occupancy: 2

Chapman 411



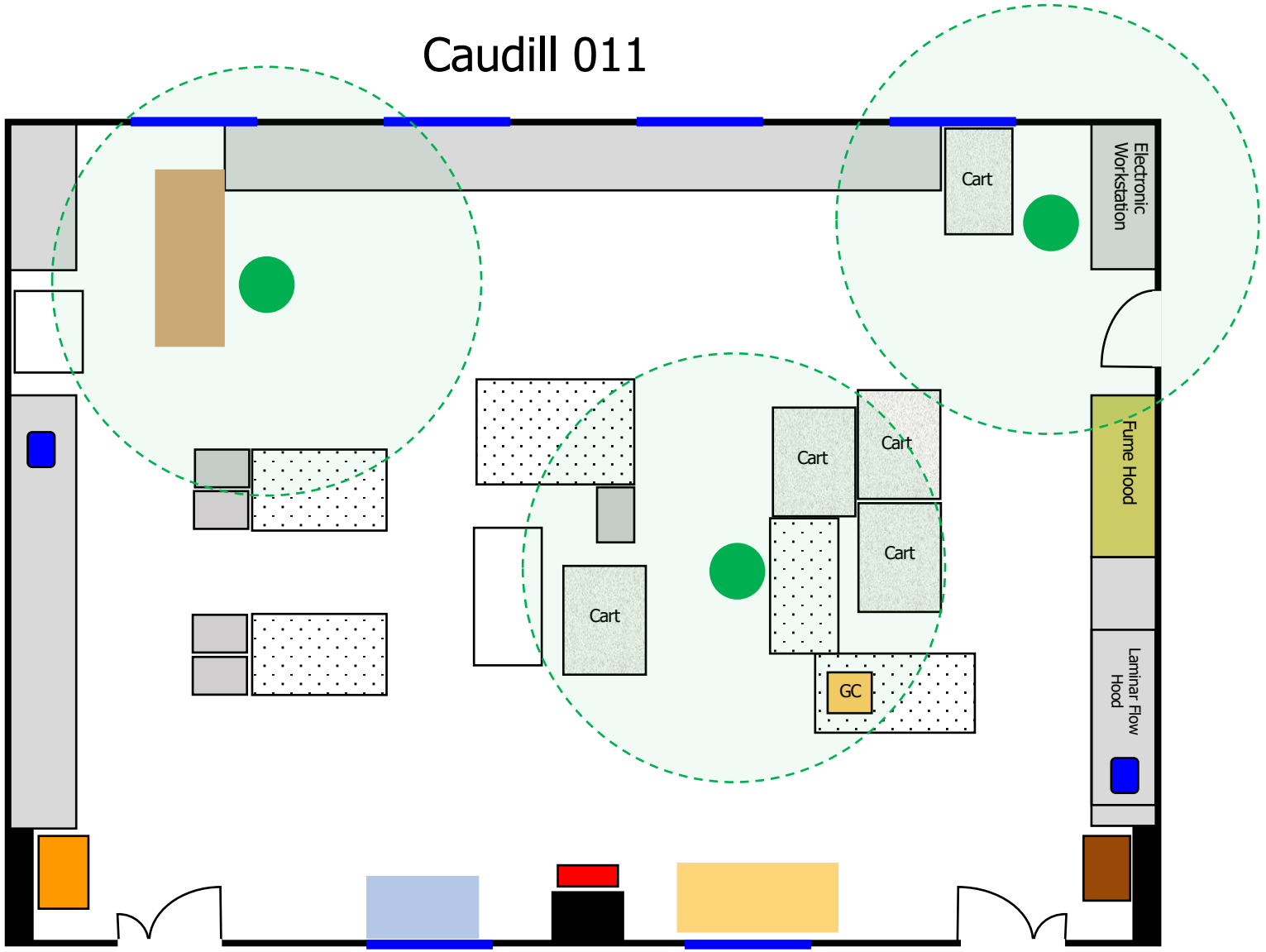
Occupancy: 2

Caudill 007B



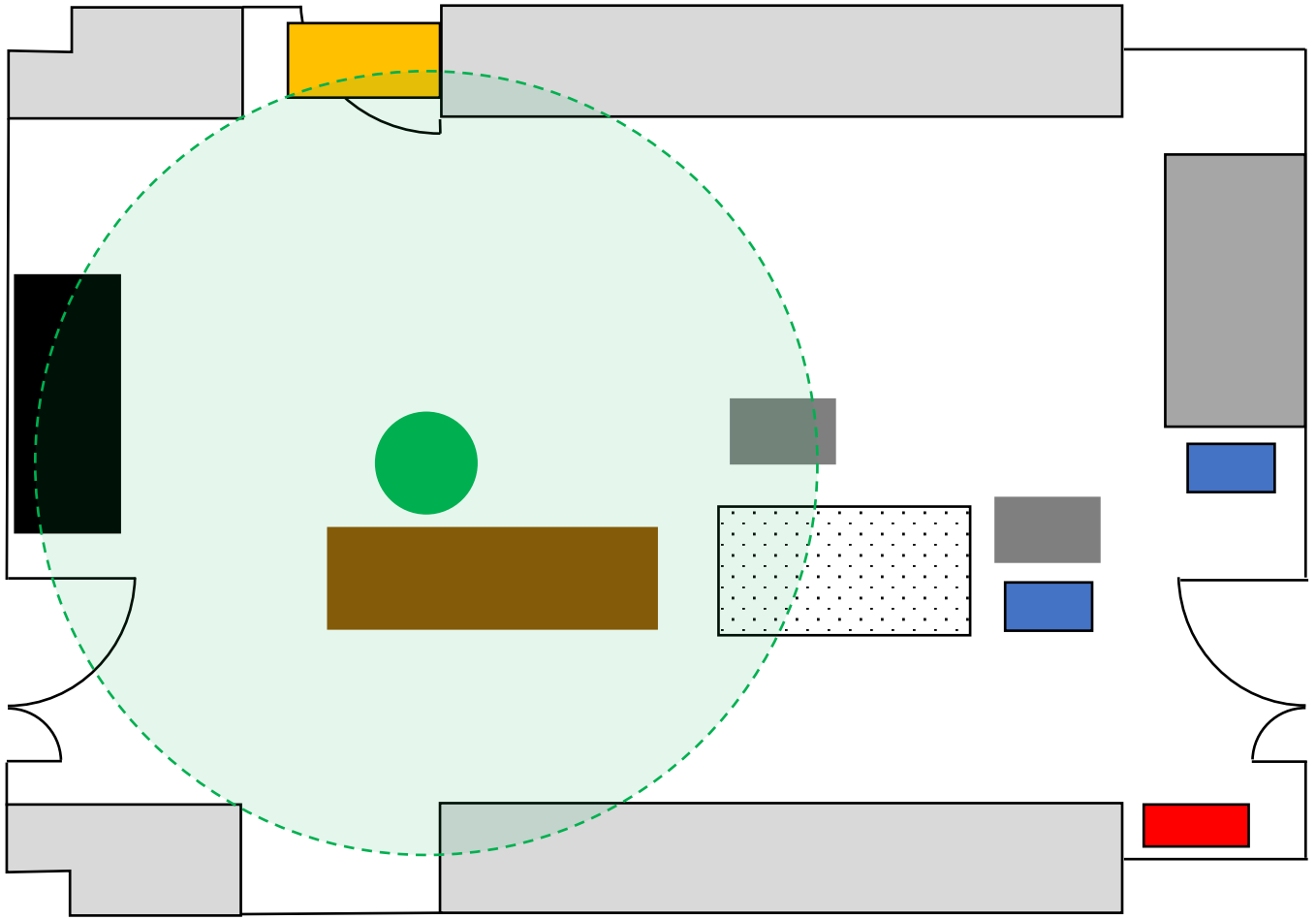
Occupancy: 1

Caudill 011



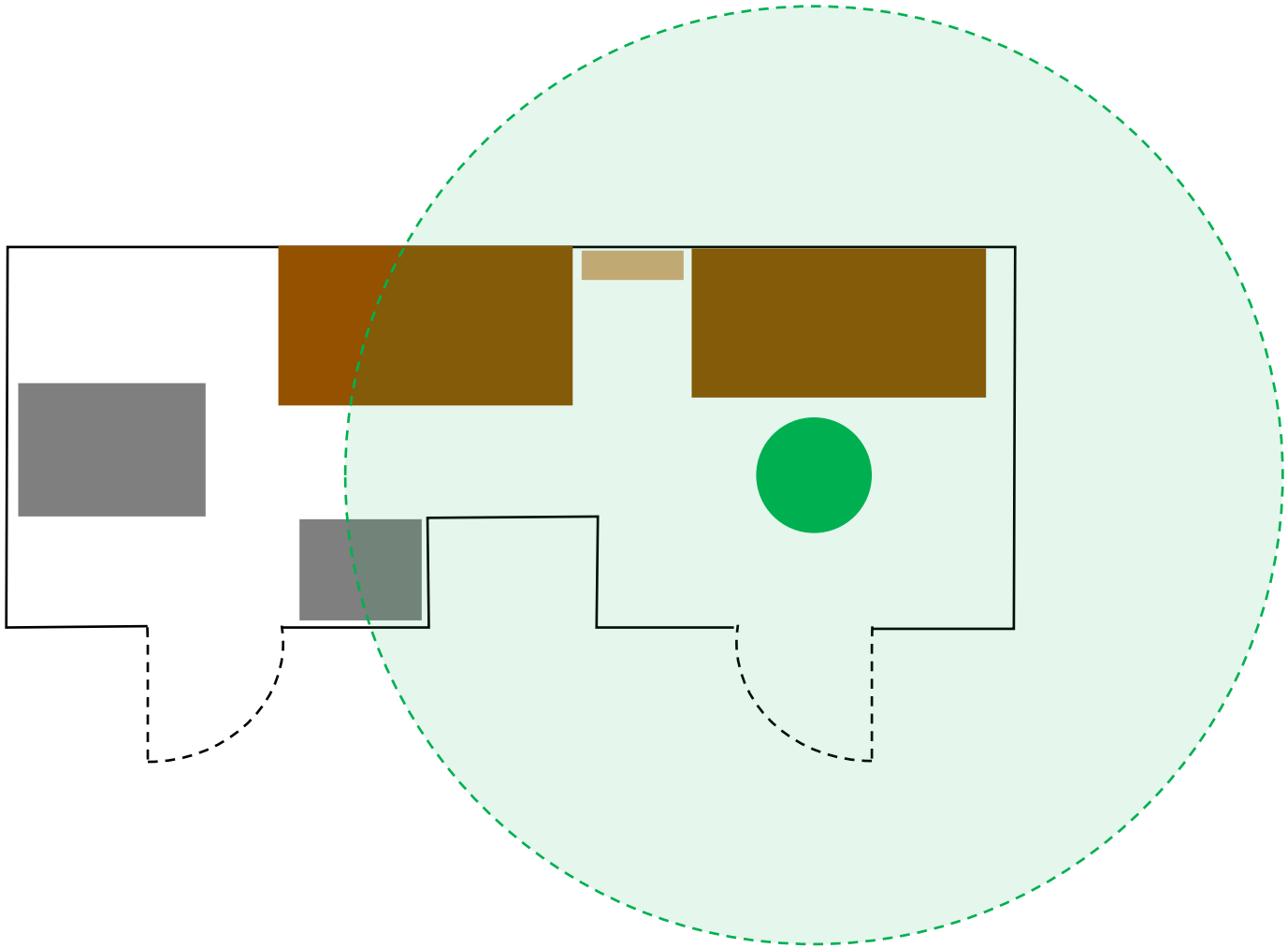
Occupancy: 3

Caudill 014



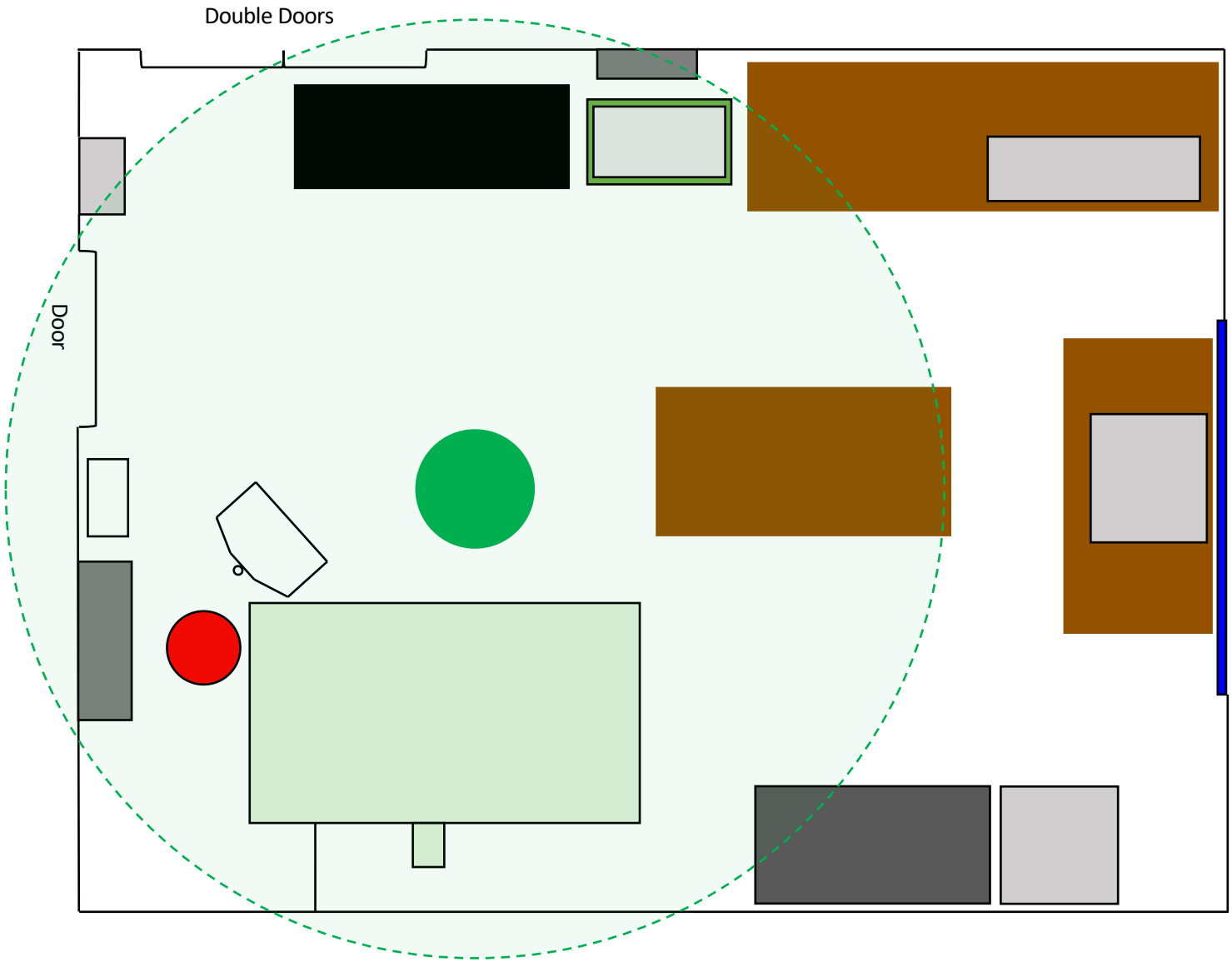
Occupancy: 1

Caudill 107B



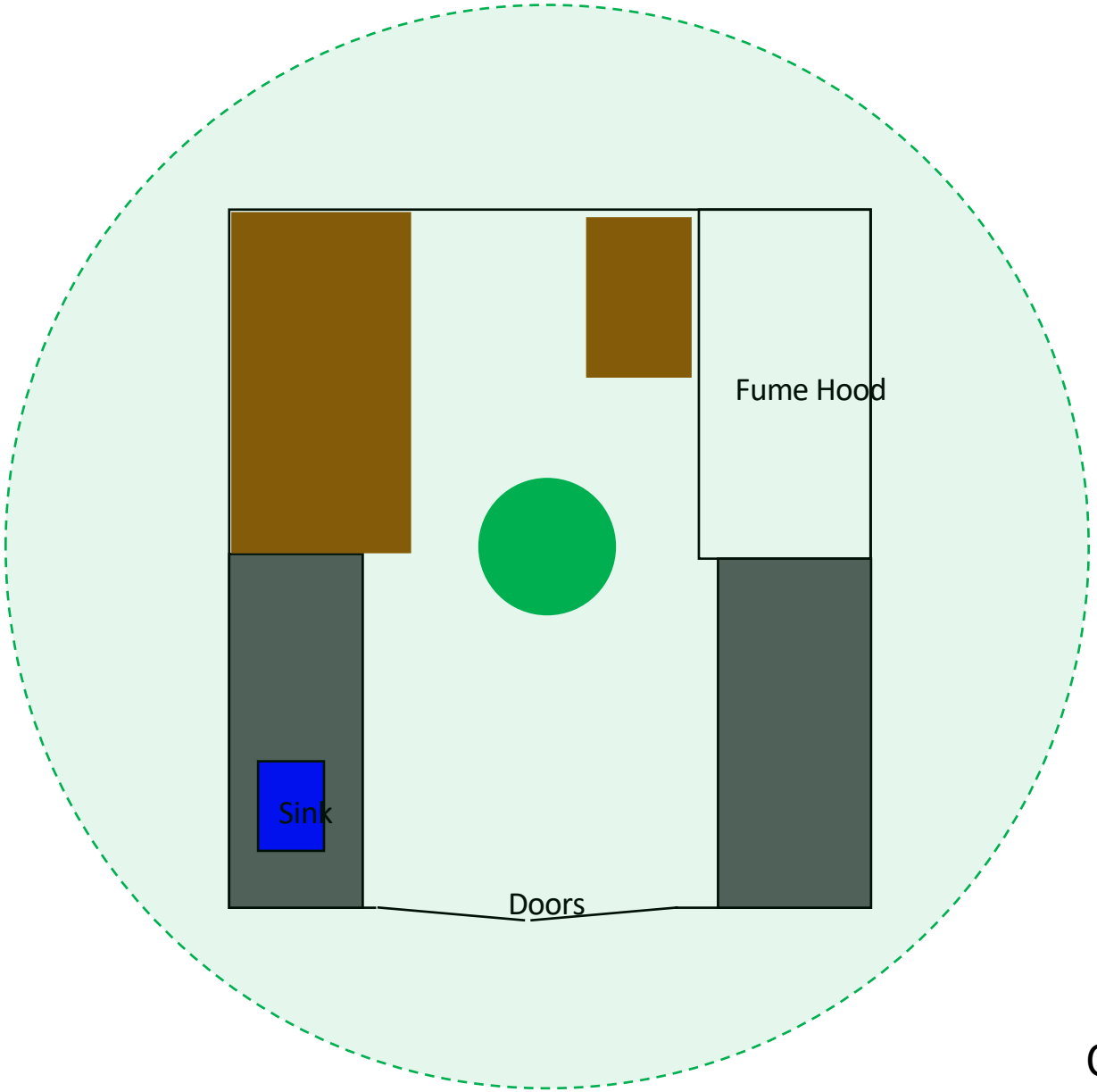
Occupancy: 1

Phillips 101



Occupancy: 1

Phillips 103B



Occupancy: 1

[Menard (Genturi)] Group Phase 2 Resumption of Research Operations

Last updated: June 8, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	0
# of postdocs	0
# of visiting scientists	0
# of staff scientist/engineers	2
# of technicians	0
# of undergraduate researchers	0

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  Genturi Inc. uses office and laboratory space on campus through a Facility Use Agreement with the University. The office space, Chapman 427, is used solely by Genturi personnel. The lab space is shared with the J. M. Ramsey Group. Office space will be used by a single user at a time, with a waiting period of at least 30 minutes between different users' use of the space. Common surfaces will be sanitized using ≥ 70% ETOH or IPA solutions at the beginning and end of a shift. We will coordinate with the Ramsey group and adhere to the Ramsey Group Phase 2 plan with regard to laboratory use. As we use a relatively small portion of laboratory space that is primarily used by one staff scientist in the Ramsey group, we will coordinate via email with the staff scientist and/or use a group calendar set up by the Ramsey group to indicate when individuals are planning experiments on campus and in which room they will be working. Room capacity numbers will be posted at the entrance of each lab. There is currently no restriction on the length or timing of a shift. If a room is booked above the indicated capacity, per below, and during the intended time we want to work, we will have to find another time for our experiments. On-campus work hours each week will be logged and archived by Laurent Menard.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  Spaces that are occupied to capacity by individuals, cannot be entered until that space drops below capacity. The laboratory space that we are primarily using (Chapman 411) has a maximum capacity of 1 person. A buffer period of 30 minutes will be observed between shifts. We have access to, but rarely use, Chapman 050 through the Facility Use Agreement. Social distances are expanded in Chapman 050 by placing plastic barriers along the center long axis of optical tables/work benches.

- Indicate the maximum occupancy for each room associated with your research program.

Chapman 050: 8
Chapman 411: 1
Chapman 427: 1 (175 sq. ft. personal, single-occupancy office)

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

  See attached floor plans for Chapman 050 and Chapman 411

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

  Workspace surfaces including instruments in use will be sanitized at the beginning and end of each shift. Surfaces will be cleaned every 2 hours if they have been used or when work at that area has been completed.

- What is your protocol for sanitizing equipment?

  Surfaces will be sanitized using ≥ 70% ETOH or IPA solutions. Surfaces will be sprayed and wiped after use.

- When will personnel wash and sanitize their hands while in lab?

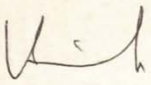
  Personnel will wash their hands once every hour. In Chapman 050, personnel will wash or sanitize their hands when moving from one bay to another. Personnel will wash and/or sanitize their hands when leaving or entering the laboratory.

What is your policy for wearing masks in lab?

All individuals working in laboratories must wear a mask. Masks will need to be worn at all times, even if no one else is present in lab. The only exception is if someone is in a personal office with the door closed.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Laurent D. Menard Jr.		6/8/2020
Varshni Singh		6/8/2020

Redinbo Group

Redinbo Group Phase 2 Resumption of Research Operations

Last updated: May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	**6**
# of postdocs	**1 (Lietzan)**
# of technicians	**1 (Walton)**
# of undergraduate researchers	**0**

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

  We employ a Google Calendar site where personnel sign up for times. Less than 50% capacity is maintained in this way, and personnel leave 30 minutes between working times.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

  Instruments have a sign-up site as well to allow personnel to access them alone. Passing one another is avoided in shared spaces – each person allows another to move through before entering. 8 feet is always maintained between researchers.

- Indicate the maximum occupancy for each room associated with your research program.

  See attached floorplan.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

  See attached floorplan.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

  Surfaces are sanitized using >70% ethanol immediately before and after use, at the beginning and the ending of each day, and at least four times per week.

- What is your protocol for sanitizing equipment?

  Shared equipment is sanitized using >70% ethanol immediately before and after use.

- When will personnel wash and sanitize their hands while in lab?

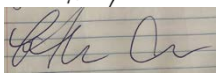
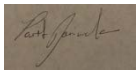
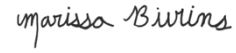
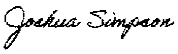
  Personnel wash their hands upon arrival, every 60 minutes while in the laboratory, and before they depart.

What is your policy for wearing masks in lab?

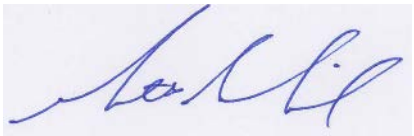
Masks are always worn in the laboratory.

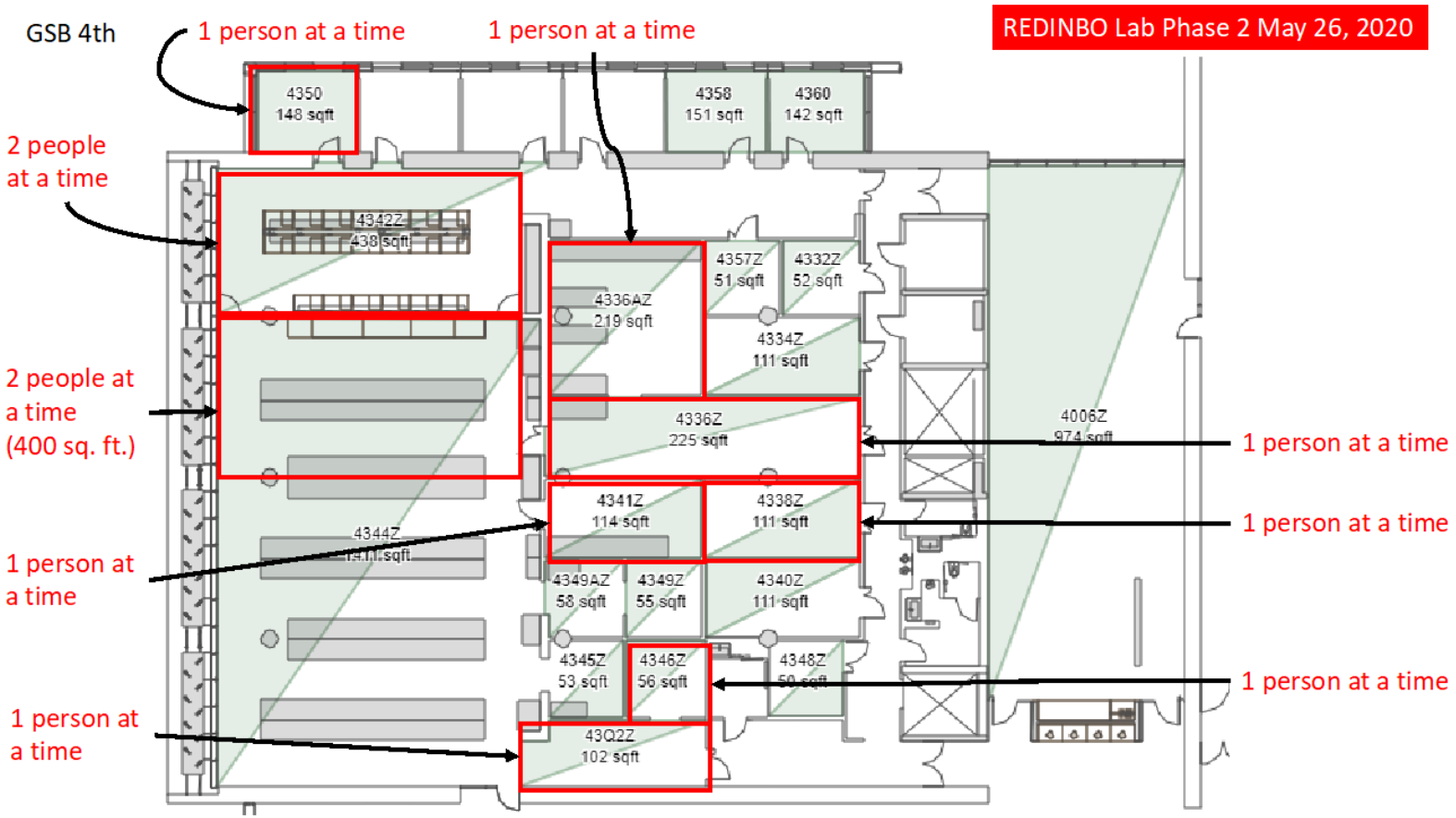
On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
William G. Walton		**May 26, 2020**
Adam Lietzan		**May 26, 2020**
Samantha Ervin		**May 26, 2020**
Parth Jariwala		**May 26, 2020**
Marissa Bivins		**May 26, 2020**
Josh Simpson		**May 26, 2020**
Morgan Gibbs		**May 26, 2020**
Amanda Graboski		**May 26, 2020**

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Matthew Redinbo		**May 26, 2020**


GSB 4th
1 person at a time
1 person at a time
REDINBO Lab Phase 2 May 26, 2020
2 people at a time
2 people at a time (400 sq. ft.)
1 person at a time
1 person at a time
1 person at a time
1 person at a time
1 person at a time
4350 148 sqft
4358 151 sqft
4360 142 sqft
4342Z 438 sqft
4357Z 51 sqft
4332Z 52 sqft
4336AZ 219 sqft
4334Z 111 sqft
4336Z 225 sqft
4006Z 974 sqft
4341Z 114 sqft
4338Z 111 sqft
4344Z 1411 sqft
4349AZ 58 sqft
4349Z 55 sqft
4340Z 111 sqft
4345Z 53 sqft
4346Z 56 sqft
4348Z 50 sqft
43Q2Z 102 sqft

Schoenfisch Group

Schoenfisch Group Phase 2 Resumption of Research Operations

Last updated: May 29, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics

# of graduate students	7
# of postdocs	2
# of visiting scientists	0
# of undergraduate researchers	3

Social Distancing Guidelines

Scheduling: Based on our available lab space, we can accommodate 20 researchers with respect to the 200 sq. ft. requirement (excluding 357A and 307A, see below floorplans). With further limiting this to ≤50% personnel, we can safely accommodate 10 researchers. We will not allow undergraduates in the lab at this time. The 9 graduate students and post-docs listed below can work simultaneously while maintaining adequate distancing. We will ensure that there are no more than 2-3 personnel in a room at any given time.

Graduate Students:	James Taylor
	Evan Feura
	Sara Maloney
	Taron Bradshaw
	Kyle Nguyen
	Quincy Dougherty
	Katherine Youmans
Postdocs:	Mingming Wang
	Kaitlyn Rouillard

A google calendar will be used for the lab to log hours.

Instruments in close proximity: Any instruments that are in close proximity to each other, such as the AFM and rheometer located in 307A, will not be used simultaneously. Personnel using those instruments will coordinate schedules as to stagger sample loading. Other instruments in close proximity will be moved to avoid any distancing concerns.

Sanitization Practices

Surfaces: Surfaces will be sanitized after use by each individual with 70% EtOH, at a minimum of four times during the workday. Surfaces will additionally be sanitized at the beginning and end of each workday. Personnel will have their own spray bottles for EtOH.

Equipment: Equipment in lab should only be used with gloves on. Each instrument will have a 70% EtOH spray bottle next to it. Personnel should spray down their gloves with EtOH prior to use to keep the instruments as clean as possible. High-touch areas will be sprayed down with 70% EtOH before and after each use.

Personnel: Personnel should wash their hands after entering the lab, after touching/removing their face masks, after removing gloves, and before sitting/eating at desk, at a minimum of once per hour.

Personal items: Only necessary items should be brought into the lab. Personal items should be sanitized and brought directly to your desk.

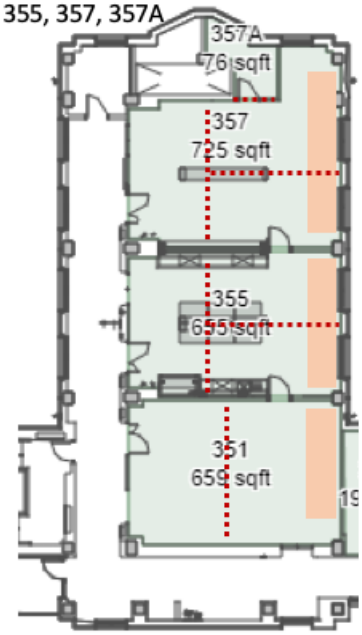
Mask Policy

Masks will be provided by the university and will be required at all times except when eating. Masks must be worn when using the hallway to walk between labs in the north and south sides of the building.

Illness Protocol

All personnel will be monitoring their own symptoms and checking their temperature daily before coming into lab. If anyone is sick, they will not come into lab.

Caudill 3rd North
351, 355, 357, 357A

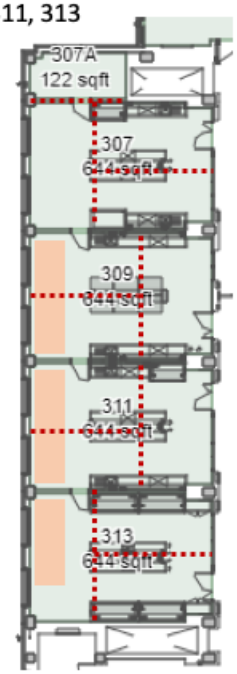


Work/desk area distancing demarcation

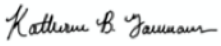
Desk area

Room	Area (Sq. Ft.)	Maximum occupancy
357A	76	1
357	725	3
355	655	3
351	659	3 (limiting to 2)
307A	122	1
307	644	3
309	644	3
311	644	3
313	644	3

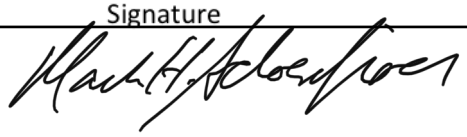
Caudill 3rd South
307, 307A, 309, 311, 313



By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Sara Maloney		5-26-20
Katherine Youmans		5-26-20
Kaitlyn Rouillard		5-27-2020
Taron Bradshaw		05-27-20
Huan Nguyen (Kyle)		05-27-2020
Mingming Wang		5-27-2020
James Taylor		05/27/20
Evan Feura		5-27-20
Quincy Dougherty		05-27-2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Mark Schoenfisch		5/29/2020

Sheiko Group

Sheiko Group Phase 2 Resumption of Research Operations

Last updated: June 1st, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	5
# of postdocs	3
# of visiting scientists	
# of undergraduate researchers	

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

We will stagger schedules so that only 4 people will be on campus at the same time:

- 8am-3pm: Andrew Keith, Mitch Maw, Benjamine Morgan, Farah Fahimipour
- 3:30-9pm: Daixuan Zhou, Yidan Cong, Erfan Dashtimoghadam, Foad Vashahi

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

We have low density occupancy: 1-2 people per room and each chemist has an individual fume hood separated by 6ft.

- Indicate the maximum occupancy for each room associated with your research program.

Ca 133: 2 people max
Ca 132C: 1 person max
Ca 132B: 1 person max
Ca 132A: 1 person max
Ca 131: 2 people max
Ca 130A: 1 person max
Ca 130B: 1 person max
Ca 007A: 1 person max
Ca 007C: 1 person max

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

We will sanitize surfaces such as lab benches, light switches, and door handles at the beginning and end of each shift and four times in between.

- What is your protocol for sanitizing equipment?

Equipment surfaces such as the hood sashes and shared equipment will be sanitized with >70% EtOH or IPA directly before and after use.

- When will personnel wash and sanitize their hands while in lab?

All group members will wash hands when they arrive and leave and every hour in between.

- What is your policy for wearing masks in lab?

Masks will be worn at all times, even in lab.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

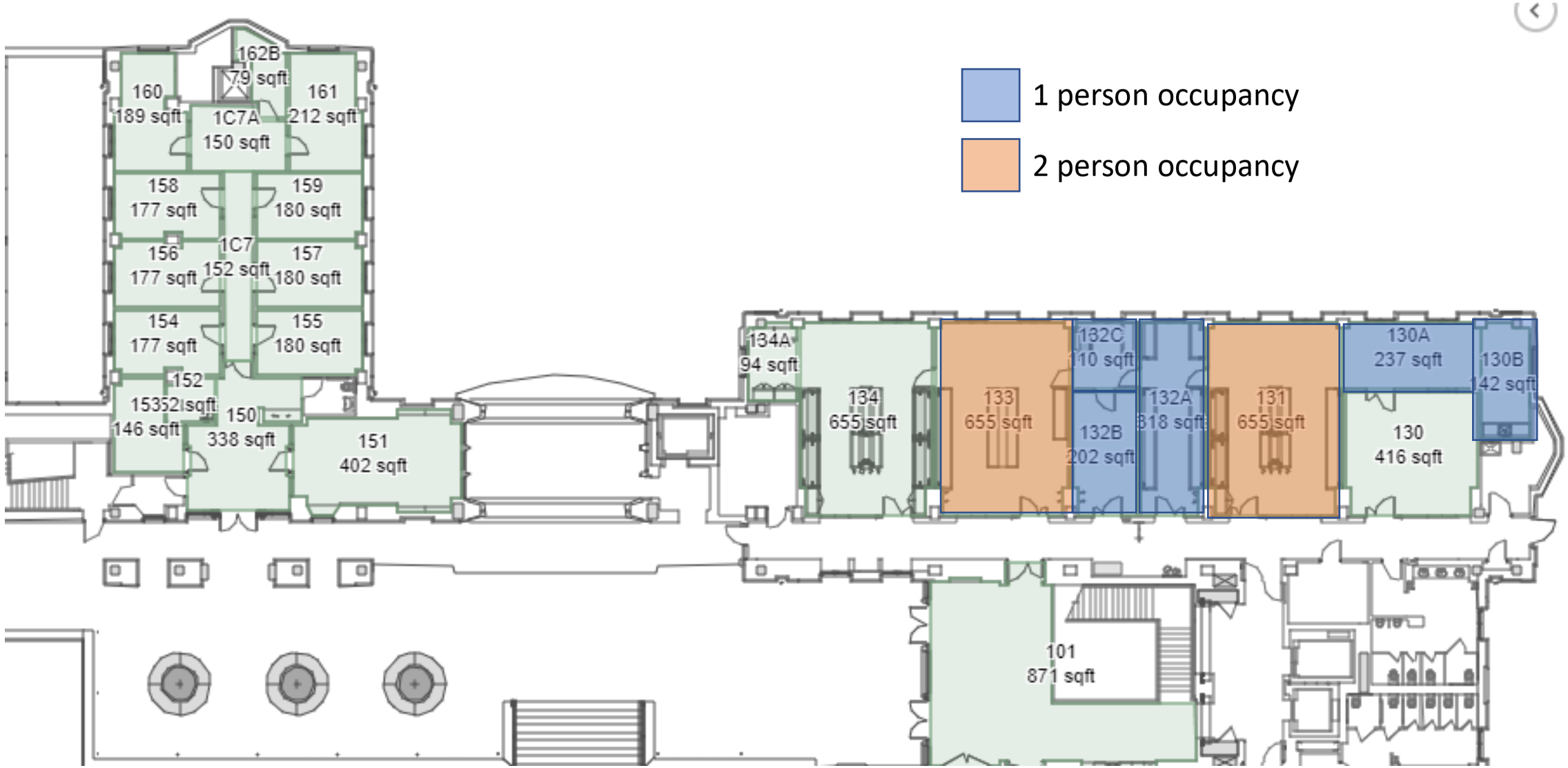
By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Andrew Keith	Andrew Keith	06/03/2020
Mitch Maw	Mitch Maw	06/03/2020
Benjamin Morgan	Benjamin Morgan	06/02/2020
Farah Fahimipour	Farahnaz Fahimipour	06/03/2020
Daixuan Zhang	Daixuan Zhang	06/02/2020
Yidan Cong		06/03/2020
Erfan Dashtimoghadam	Erfan Dashtimoghadam	06/03/2020
Foad Vashahi	Foad Vashahi	06/11/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

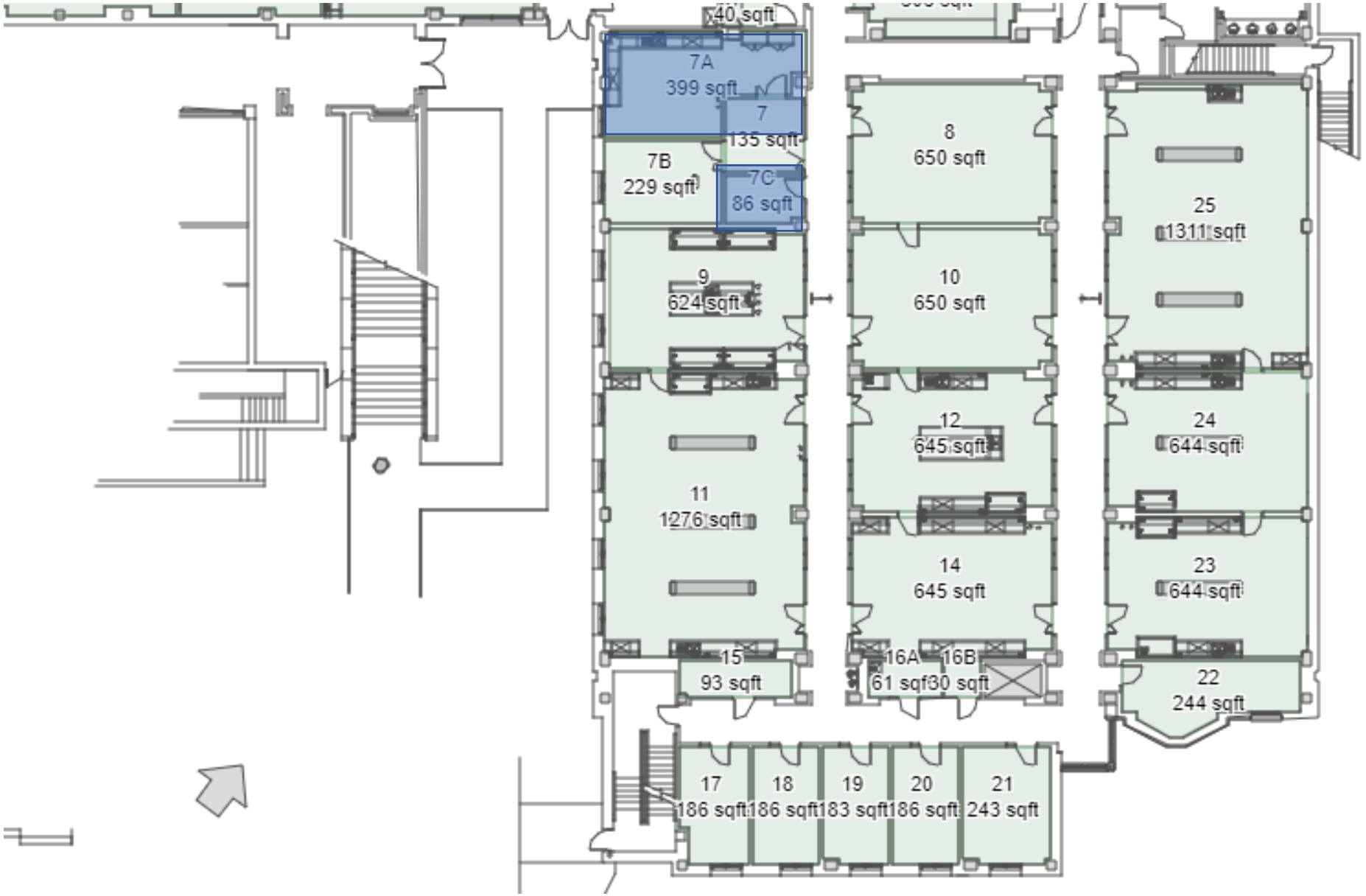
Printed name	Signature	Date
Sergei Sheiko	Sergei Sheiko	06/11/2020

Caudill 1st North



Caudill Ground South

Max occupancy: 1 person in 7A and 7C



Warren Group

Warren Group Phase 2 Resumption of Research Operations

Last updated: May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	6
# of postdocs	2
# of visiting scientists	0
# of undergraduate researchers	0

Lab rule: Everyone must read that first document.

Detail your plans to maintain social distancing:

•How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

Our lab will operate on a staggered schedule, with students signing up for days of the week to come into lab. The maximum number of students allowed to work in lab is 5 students. To coordinate schedules, students will sign up via a shared google sheet for days to come into lab, as well as the instruments and/or fume hoods that the students plan to use, and the times that the students plan to eat (if applicable). We are restricting which students are allowed to be in lab at the same time, based on the proximity of desks (e.g. students who have adjoining desks are encouraged to sign up for different days).

Note: A minimum of two people are required in lab at all times while students are actively performing experiments. If a second person cannot be physically present in lab, the student in lab can have someone monitor them virtually via Zoom.
In order to protect our lab mates, we have also agreed to avoid, as much as possible, high-risk scenarios that could potentially endanger ourselves and others. In the event that we are exposed to someone with symptoms or participate in a high-risk activity, we will isolate ourselves for the recommended amount of time before returning to lab. We are also choosing modes of transportation to get to campus that pose the least amount of risks to ourselves. The following are the modes of transportation that we have agreed upon:

Walking/Biking – low risk
Driving – low risk
Taking Uber/Lyft – low to medium risk
Riding bus – medium risk (students who must use this option are encouraged to take precautions for themselves (i.e. wear a mask, avoid crowded buses, sanitize their hands, sit far away from others, get off the bus if the bus becomes crowded etc…)

• How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

In our lab, most instruments, except in the optical room, are sufficiently spaced out that students should not be in a situation where social distancing guidelines cannot be followed. On

the google sheet, students may not sign up for an instrument or fume hood that is in the same region as an instrument/fume hood that another student is using at the same time. On the shared google sheet, we have explicitly listed which instruments/hoods can be used simultaneously. These regions are also defined in our demarcated floor plan.

Note: If social distancing guidelines absolutely cannot be met between instruments and bench spaces, the students who must be in close proximity will wear face shields over their masks as an extra precaution.

- Indicate the maximum occupancy for each room associated with your research program.

For the main laboratory space (Kenan A807), the maximum number of personnel allowed is 5.
For the optical room (Kenan A800), the maximum number of personnel allowed is 2.
For Kenan A804, the maximum number of personnel allowed is 1.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?

In our lab, surfaces will be sanitized four times per day. We have created another shared google sheet where each student signs up for a time slot (morning, early afternoon, late afternoon, before leaving lab) to sanitize the surfaces in lab, including door handles, sink spaces, and common spaces. This sheet explicitly states the spaces that need to be sanitized and the student is responsible for making sure that the spaces are thoroughly cleaned.

- What is your protocol for sanitizing equipment?

For sanitizing equipment, we will be using either Clorox wipes or a 70% IPA solution with biodegradable wipes. The wipes and cleaning solutions will be placed in locations throughout the lab spaces so that they are easily accessible for students.
1) Equipment that students operate without gloves will be sanitized before and after each use. For example, if Madeline uses the microscope and computer, she will wipe down the keyboard, mouse, and microscope components that she will touch. After using the equipment, she will wipe down the parts again.
2) For instruments that students are required to operate with gloves, students will sanitize the equipment at the end of each shift.

***__Note:__** A cleaning procedure is being developed for each shared instrument and will be posted online and on the instrument for individual students to follow after use. We are also obtaining plastic keyboard covers that can be sanitized more easily.

- When will personnel wash and sanitize their hands while in lab?

Based on university and departmental guidelines, lab personnel will wash their hands:

- Immediately upon entering the building
- Upon arriving in lab
- Before touching equipment without gloves
- After using a piece of equipment without gloves
- After finishing experimental work and before returning to desk spaces.
- Before eating
- After eating

- After handling their masks
- After sanitizing lab spaces
- After exiting the stairwell or elevator
- At least once per hour
- Before leaving lab
- When exiting the building

• What is your policy for wearing masks in lab?

Lab personnel will wear masks at all times in lab, including:

- When performing experiments
- When working at desk spaces
- When walking in the hallways or stairwells

Notes: If a student needs to remove the mask for any reason (e.g. to answer a phone call), that student needs to leave the building. Students should wear tight-fitting masks to help prevent their glasses from fogging. If a student must wear goggles that fog more easily, and needs to remove the mask to defog his/her goggles, the student should wear a face shield so that they minimize the amount of respiratory droplets.

When performing experiments, students should wear flame-retardant masks. At their desks, students will wear a different mask that complies with university guidelines.

Students will dispose of their masks after they become contaminated or damaged. Also, it is recommended that personnel have separate masks for working at their desk area from the one they use at their bench spaces. Lab personnel will store their masks in a paper bag when not in use.

Exception: The only time masks can be removed is during eating. Students are strongly encouraged to eat outside, weather-permitting. In the event of inclement weather, we have created a designated eating area in lab (the first desk in lab). Students will sign up for 20-minute time slots for lunch on the shared google sheet. After a student eats at the designated eating area, they should wipe down and sanitize the area. There will be a 15-minute waiting period between students eating in the designated area.

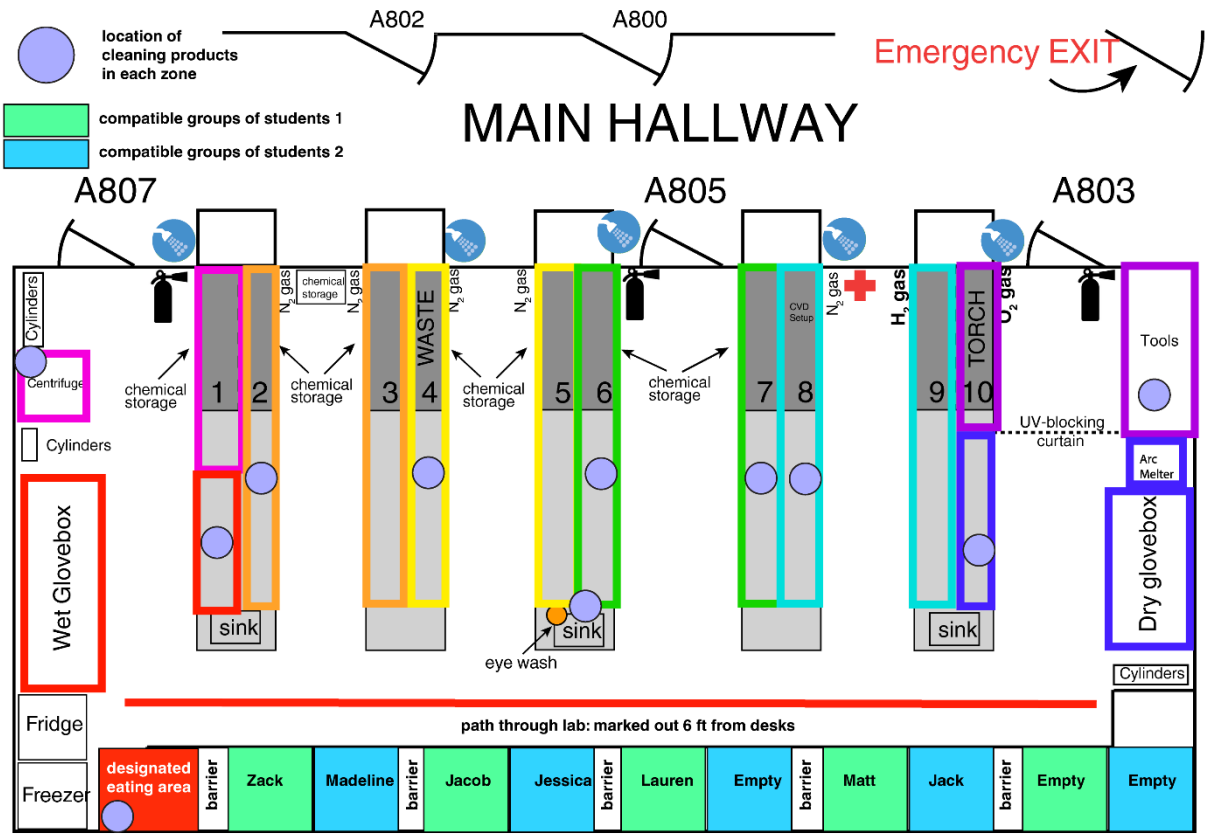
By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Dan Druffel	Daniel Druffel (May 28, 2020 09:43 EDT)	5/28/2020
Zachary Fishman	Zachary Fishman (May 28, 2020 09:23 EDT)	5/28/2020
Jacob Pawlik	Jacob Pawlik (May 27, 2020 16:45 EDT)	05/27/2020
Jack		5/27/2020
Madeline Stark	Madeline Stark	05/27/2020
Jessica Coleman		5-27-2020

Lauren McRae	Lauren McRae Lauren McRae (May 27, 2020 16:33 EDT)	5/27/2020
Matthew	Matthew Lanetti Matthew Lanetti (May 27, 2020 16:45 EDT)	5/27/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Scott Warren	Scott Warren	5/27/2020

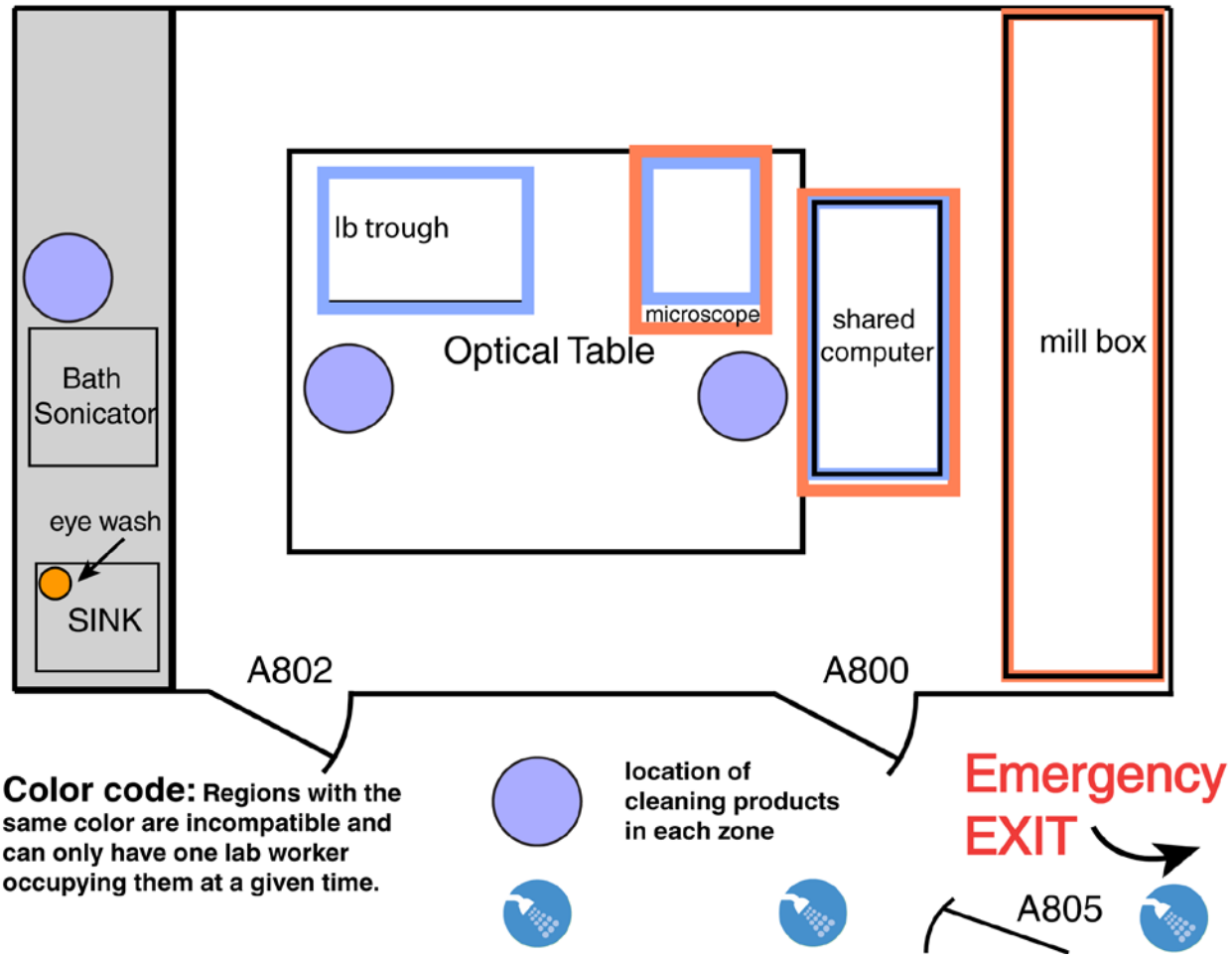


Color code: Regions with the same color are incompatible and can only have one lab worker occupying them at a given time

Kenan A807/A805/A803

Kenan A800/A802

Maximum occupancy: 2



Color code: Regions with the same color are incompatible and can only have one lab worker occupying them at a given time.

location of cleaning products in each zone

Waters Group

WATERS Group Phase 2 Resumption of Research Operations

Last updated: July 6, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	9
# of postdocs	1
# of visiting scientists	0
# of undergraduate researchers	4

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
  I am achieving ≤50% capacity through a combination having those that are writing dissertations or papers work from home, having 2 undergrads not come back to lab and 2 undergrads come in only 2 days a week, and reducing the days worked by the remaining students and postdocs to a 4 days on/3 day off schedule.

  We will log attendance with both a paper form attached to each lab door as well as Microsoft Shifts.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
  Zones that are 8 feet apart will be taped on the floor. A sign-up form has been created and instrument usage will be staggered so that students will be able to maintain social distancing. Plexiglass barriers will be put in place in between instruments where feasible.

- Indicate the maximum occupancy for each room associated with your research program.

  The max occupancies listed below are those with 200 sf distancing, not the occupancy for which the lab was designed.

  - Caudill 207 (644 sf): Max occupancy = 3
  - Caudill 208 (644 sf): Max occupancy = 3
  - Caudill 209 (644 sf): Max occupancy = 3
  - Caudill 211 (644 sf; shared with Johnson): Max occupancy = 3
  - Kenan A305 (916 sf): Max occupancy = 4
  - Kenan B332 (439 sf; shared with Ehrmann): Max occupancy = 2

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

See attachments at the end of the document. Yellow boxes indicate work zones for each student. Furthermore, students will maintain 8 ft distancing at all times, including entering/exiting the room.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
  As per dept guidelines, surfaces will be sanitized at the beginning and end of every shift and additionally 4 times per day.

- What is your protocol for sanitizing equipment?
  As per dept guidelines all touch surfaces (keyboards; screens, etc) will be sanitized with >70% isopropanol before and after use, at least 4 times total per day.

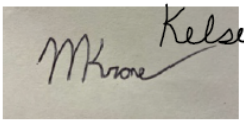
- When will personnel wash and sanitize their hands while in lab?
  As per dept guidelines, hands will be sanitized at the beginning and end of every shift and at least hourly for the entirety of the time on campus including: before and after using the bathroom, before and after touching one's face, before and after touching a keyboard or any other surface, before and after using the elevator, before and after using the stairwell.

What is your policy for wearing masks in lab?

As per dept guidelines, masks will be worn at all times except when eating. Masks will be cared for and stored following university guidelines and will not be used more than 5 shifts in a row. The group will order a back-up supply of masks to supplement those provided by the university.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

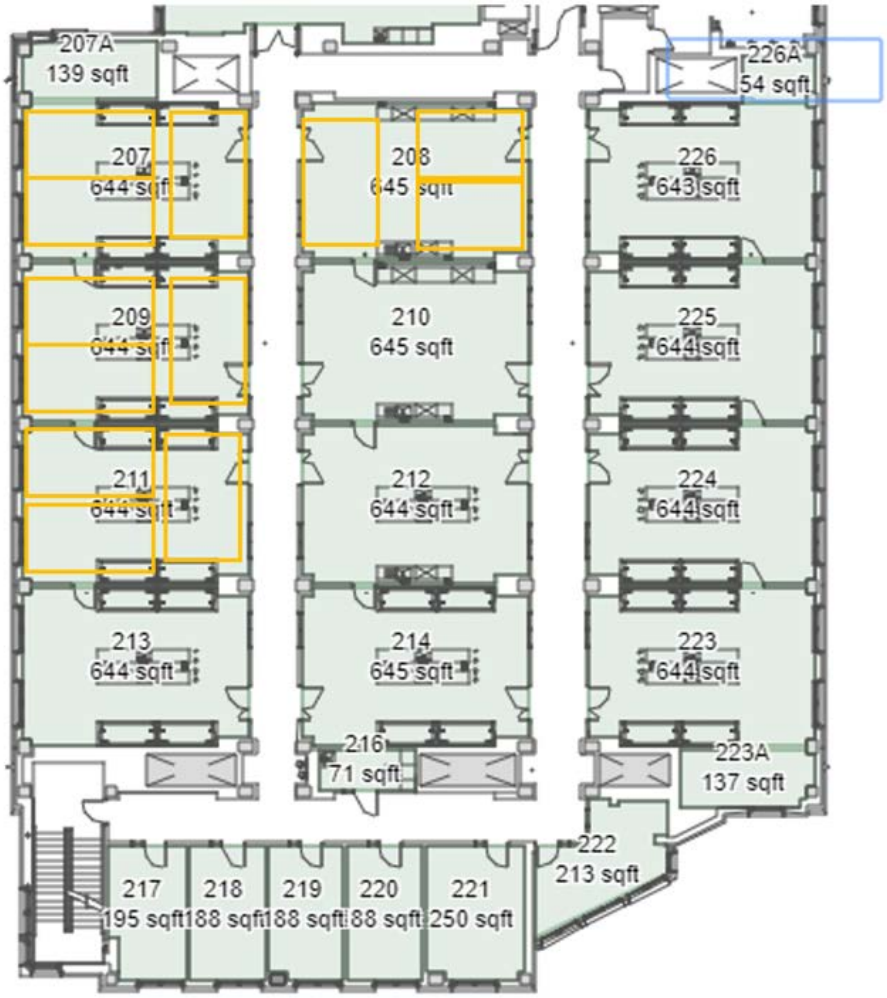
Printed name	Signature	Date
Katherine Albanese		05/28/20
Ben Carpenter	Benjamin Carpenter	05/28/20
Hannah Ferguson Johns		05/28/20
Emily Harrison	Emily Harrison	05/28/20
Hanne Henriksen		05/28/2020
Kelsey Kean	Kelsey M Kean	5/28/20
Mack Krone		5/28/20
Tim Schwochert		5/28/20
Adam Sowers		5/29/20
Kyla Stingley		5/29/20
Christopher Travis		5/29/20

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

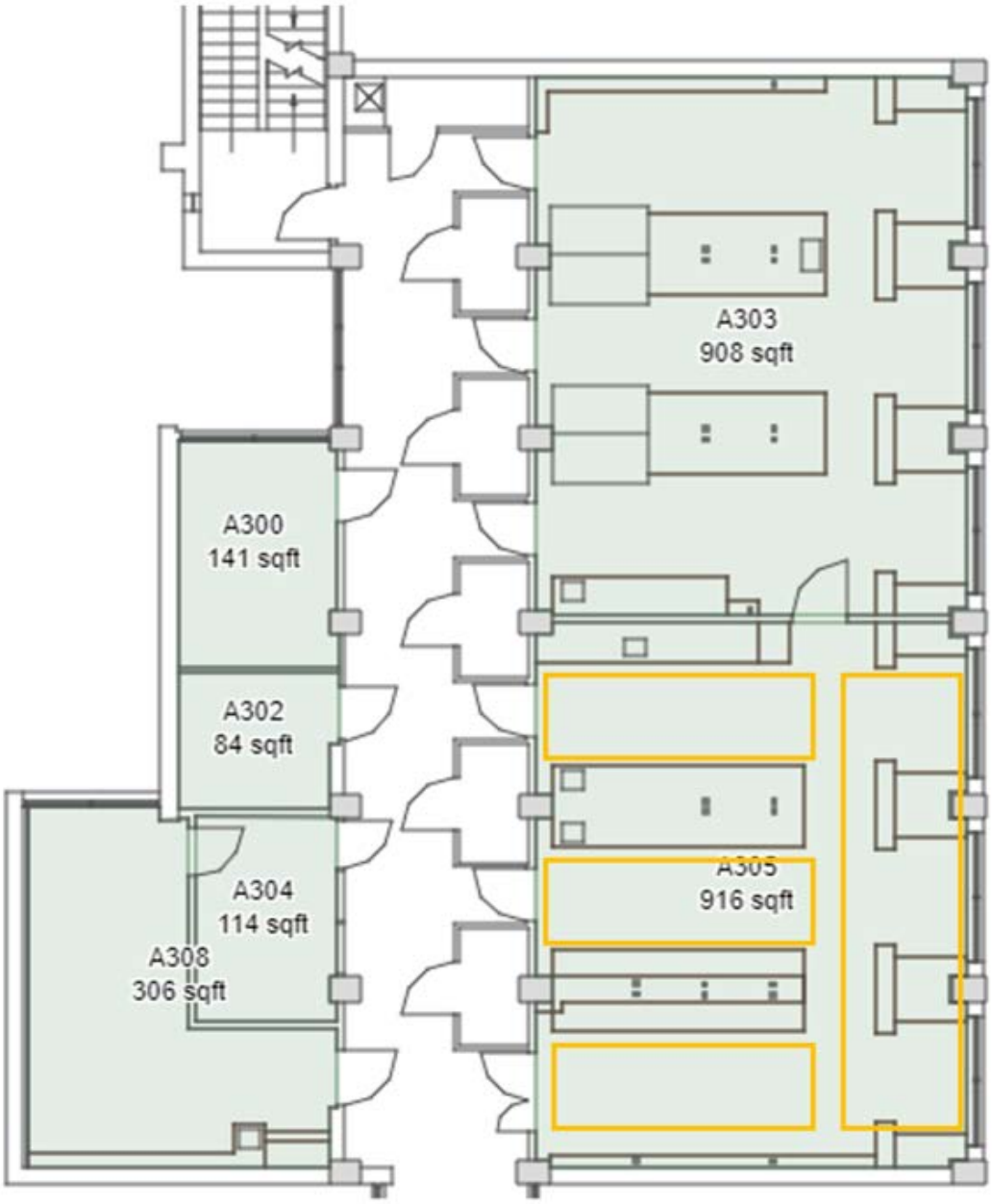
Printed name	Signature	Date
Marcey Waters		05.28.2020

Floor plans: yellow boxes indicate social distancing areas for each student.

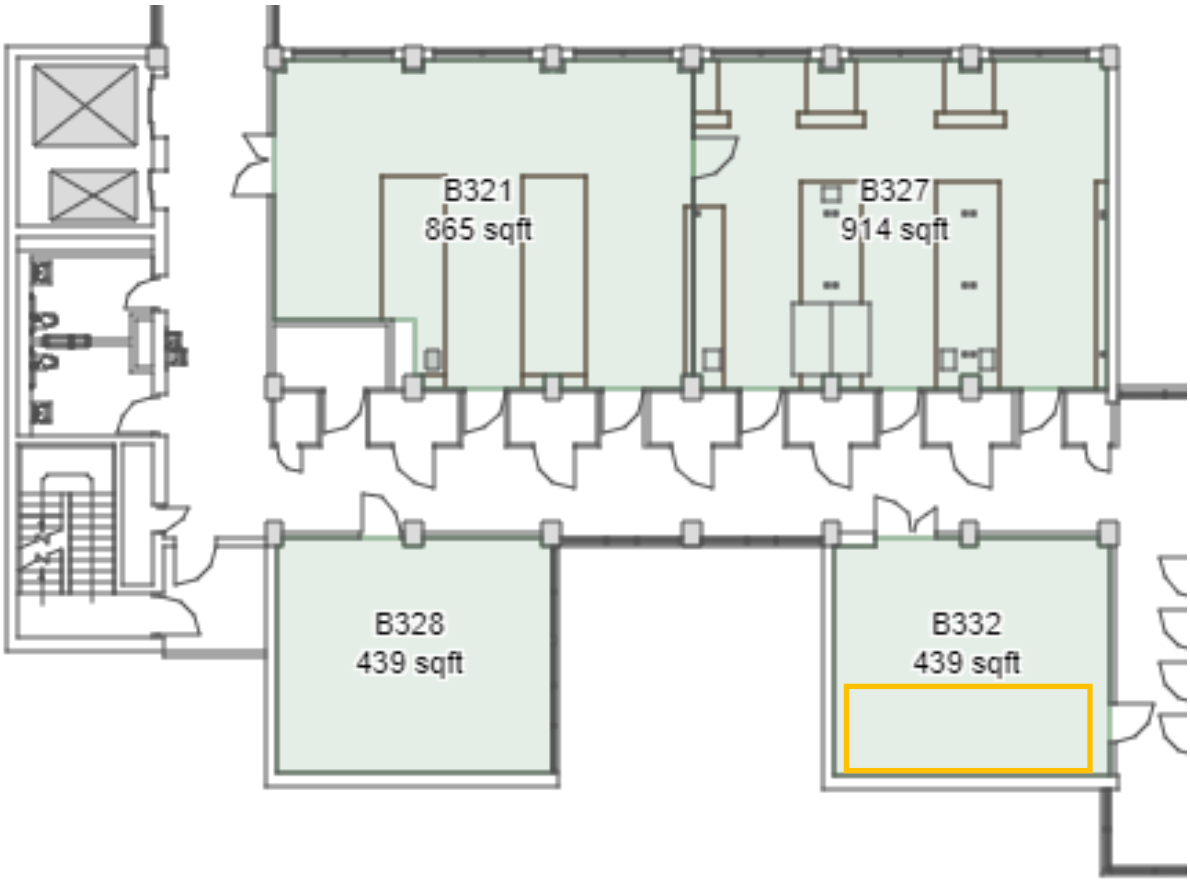
Caudill 2nd South



Kenan 3rd A-tower



Kenan 3rd B-tower



Weeks Group

Weeks Group Phase 2 Resumption of Research Operations

Genome Sciences Building, 3rd Floor, middle (orange) pod
Last updated: May 27, 2020

Group demographics:

# of graduate students	8
# of postdocs	3
# of staff	1
# of undergraduate researchers	0 (during summer)

Social distancing:

Personnel in lab and desk areas will maintain 6' distance and 1 occupant per 250 sq ft.

Lab members whose desks are in cubicles are already spaced 6' apart. Personnel sitting at the side desks will be limited to 1 per linear bench, a distance greater than 6'.

In the main lab area, personnel are limited to two individuals per lab bay.

For our smaller research rooms (chemicals and weighing room, sequencer and instrument room, and tissue culture room), occupancy is limited to one person at a time.

Currently, essentially half of the lab is primarily working on non-wet lab activities including bioinformatics and computational biology projects and manuscript writing. For June, 50% occupancy will be maintained informally, with lab members working off-site for non-laboratory activities. To facilitate coordination and 50% occupancy, we are maintaining a cell phone list to facilitate informal communication.

Arrival and departure times for lab personnel will be logged on the lab whiteboard adjacent to the chemicals room.

Sanitation and Lab Personnel Protection:

Masks to be worn at all times in the Genome Sciences Building.

Hands will be washed upon arrival to the GSB, every hour while personnel are at work, and upon departure.

High-touch will be cleaned upon arrival, immediately before departure from the lab, and at least four times during the day. High-touch surfaces include door handles, equipment handles and keyboards, and freezer handles.

Ethanol solutions and paper towels provided in every lab bay, in desks area, and in each individual research room. Lab spaces and instrument panels cleaned after every use.

Gloves worn during all research work (this is normal practice in our lab); gloves should be changed frequently.

Glass windows at exterior of chemical and tissue culture hoods require special attention due to close proximity to faces and will be cleaned before and after every use.

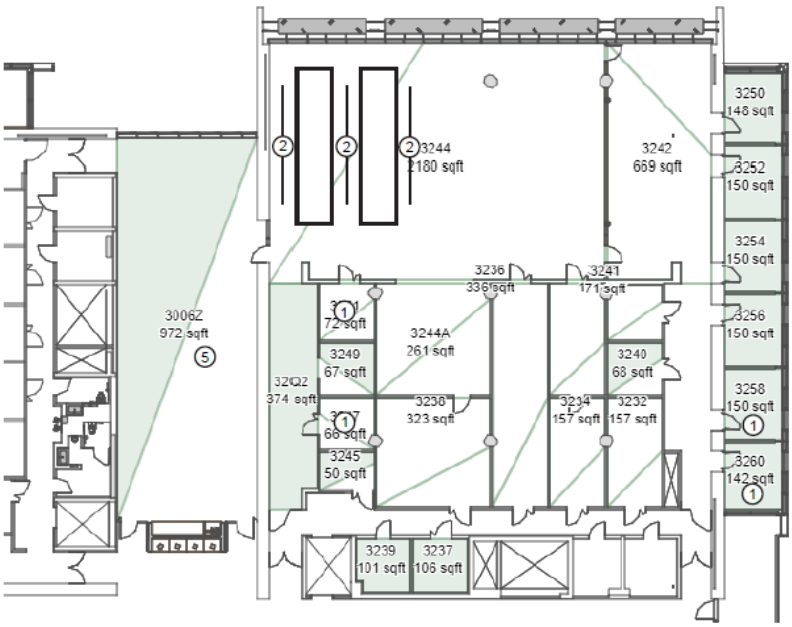
Maintaining Safe Work Environment:

Hands washed upon entering Genome Sciences Building.

Doors between lab and desk spaces to be propped open during working hours to reduce need to touch common surfaces. Doors closed at end of workday.

Other practices as outlined in the Phase 2 Resumption of Chemistry Operations document.

Room and occupancy plan attached.



Glass windows at exterior of chemical and tissue culture hoods require special attention due to close proximity to faces and will be cleaned before and after every use.

Maintaining Safe Work Environment:

Hands washed upon entering Genome Sciences Building.

Doors between lab and desk spaces to be propped open during working hours to reduce need to touch common surfaces. Doors closed at end of workday.

Other practices as outlined in the Phase 2 Resumption of Chemistry Operations document.

Room and occupancy plan attached.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Winston Arney		6/2/2020
Mark Boerneke		6/2/2020
Samuel Olson		6/3/2020
Patrick Irving		6/3/2020
Jeff Ehrhardt		6/3/20
Jordan Koehn		6/8/2020
Catherine Giacinetti		6/11/2020
Philip Grayeski		6/22/2020
Thomas Christy		6/22/2020
Amy Aponte		6/22/2020
Breanne Hatfield		6/22/2020
Seth Veenbaas		6/23/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Kwin Weeks		2 June 2020

Wilkerson-Hill Group

Wilkerson-Hill Group Phase 2 Resumption of Research Operations

Last updated: May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	4
# of postdocs	1
# of visiting scientists	0
# of undergraduate researchers	2
# of summer research students	2

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
  Work schedules are staggered based on everyone's *position* in the laboratory *and additionally* by research projects. There are 4 hoods per research bay, and my lab has 2 bays. Therefore, we will have 2 students per bay (one on each side of the central bench) at all times. The students are on a MTW or HFS schedule and are encouraged to work 12 h days. In doing so, we minimize the number of DIFFERENT people in the lab on a day to day basis and maintain continuity for students to conduct their experiments. A general outline can be seen below. Green = MTW Blue = HFS Red = In office, not in lab. Yellow = Undergrads. No research during Phase 2.

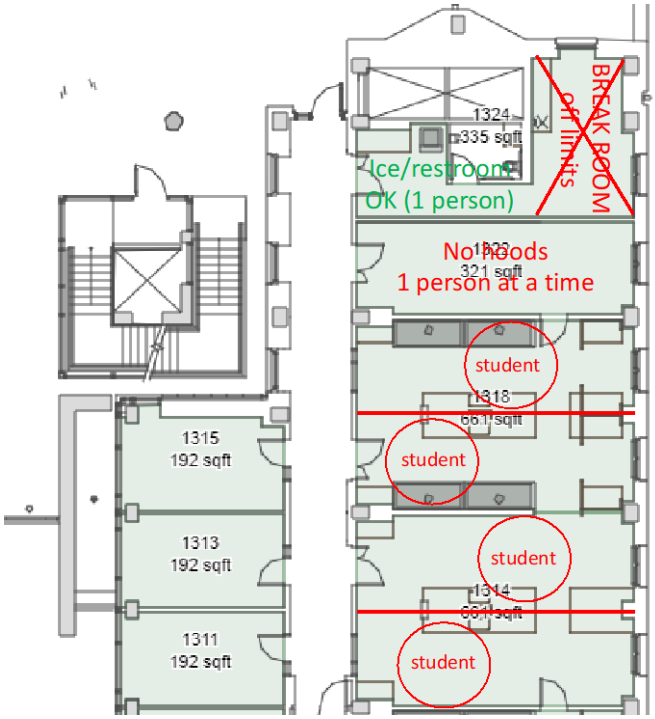
	STATUS	BAY	MONDAY	TUESDAY	WEDNSDAY	THURSDAY	FRIDAY	SATURDAY
DOUG	G2	1	X	X	X			
ADAM	G2	1				X	X	X
JOEY	G2	1	X	X	X			
NINA	G1	2	X	X	X			
ELSA	PD	2				X	X	X
ISAIAH	SS	2	X	X	X			
NICHOLAS	SS	2				X	X	X
SID	PI	1	X	X	X	X	X	X
ANDREW	UG	1	O	O	O	O	O	O
PRISCA	UG	2	O	O	O	O	O	O

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?
  All common areas and instruments will be wiped down with an isopropanol solution after each use. Mask will be worn in these instances. Common areas such as the conference room and break room are closed until further notice. The 1324 Ve contains our ice machine and a restroom which are ok to use, so long as one person occupies 1324 at at time.

- Indicate the maximum occupancy for each room associated with your research program.

- Maximum occupancy based on square footage is 3 people (661 sqft/200 sqft requirement = 3.31 people). However, the design layout in our laboratory is best suited for 2.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.



Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized?
- Every 3 hours to meet the 4 max requirement, beginning at the start of shift, 7a. Another round at 11a, then 3p then 7p.

- What is your protocol for sanitizing equipment?

- Equipment will be sanitized after each use with ethanol or isopropanol solution (>70%).

- When will personnel wash and sanitize their hands while in lab?

- Hourly, when entering and exiting a building, lab, office and/or hallway and before/after handling your mask.

What is your policy for wearing masks in lab?

Masks will be worn at all time, *unless it poses and immediate safety risk. This will be approved by the PI.*

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Elsa Hinds (Barter)	Elsa Hinds	05/26/2020
Nina Cox	Nina Cox	5/26/20
Andrew Morrow	Andrew Morrow	5/26/20
John Johnson	John Johnson	05/26/2020
Adam Zaharo		5/27/2020
Joseph Mancinelli		5/27/2020
Isaiah Eckart-Frank	I Eckart-F	5/27/2020
Nicholas Aktawi		5/27/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Sidney M. Wilkerson-Hill		05/27/2020

You Group

Wei You Group - Phase 2 Resumption of Research Operations

Last updated: May 31, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

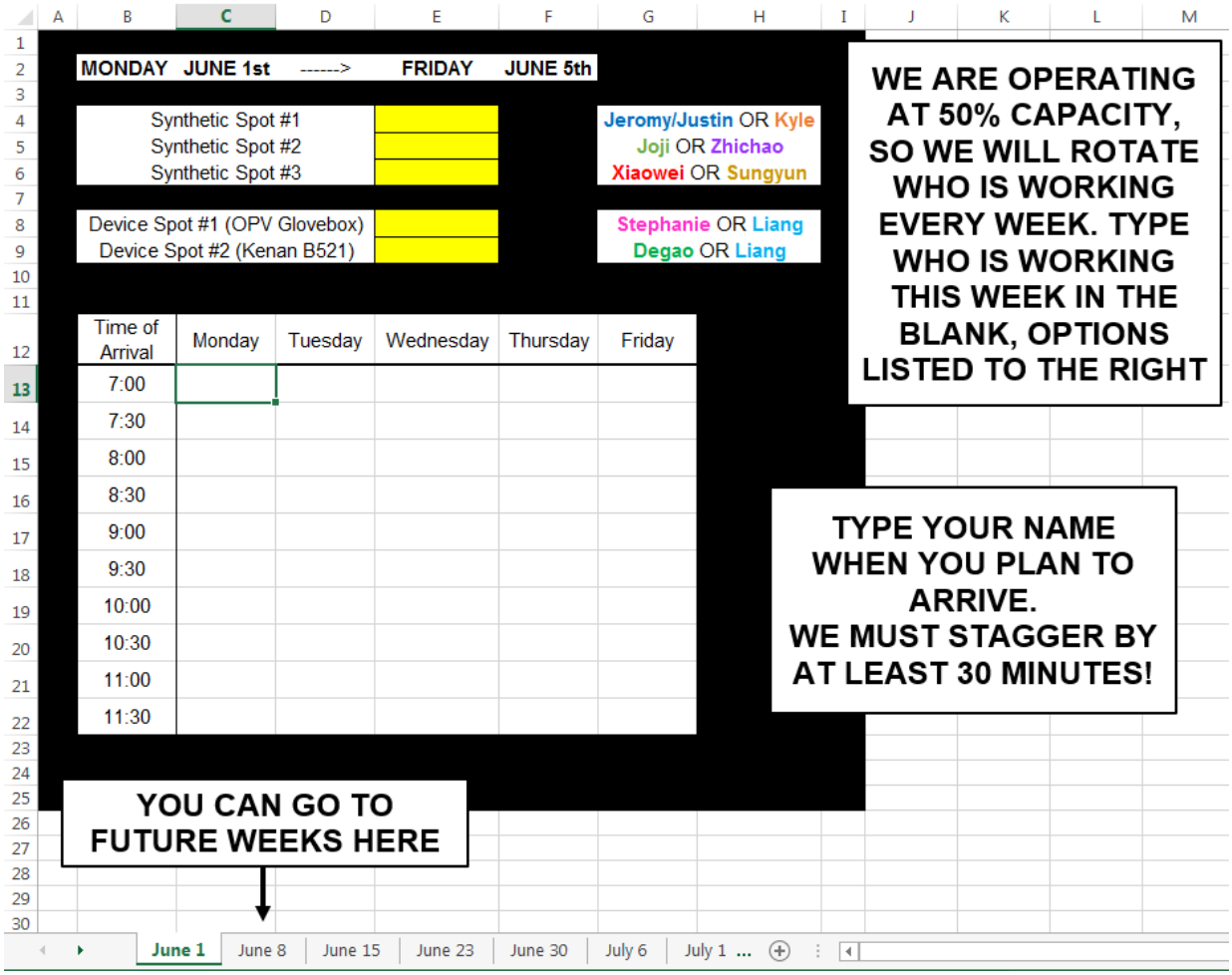
Group demographics:

# of graduate students	5	Jeromy, Kyle, Stephanie, Xiaowei, Justin
# of postdocs	3	Zhichao, Sungyun, Joji
# of visiting scientists	1	Degao
# of research associates	1	Liang
# of undergraduate researchers	1	Noel - *NOT ALLOWED IN LAB DURING PHASE 2*

Detail your plans to maintain social distancing:

How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

- If work can be done remotely (i.e. writing papers, reading literature, analyzing data, making powerpoints or graphics, writing grants, etc), do this work at home!
- We have now implemented a sign-in sheet for the laboratory which each person is required to use prior to traveling in to the lab. This sign is sheet is available in the shared OneDrive folder [\OneDrive\University of North Carolina at Chapel Hill\You, Wei - You Group\00. COVID 19\SCHEDULE (only edit in web browser)] – a screenshot is available below. There are only certain number of slots (which correspond to 50% capacity) and the arrival times are staggered by the requested 30 minute intervals.
- You must coordinate with rotating partner (i.e. Joji and Zhichao) on who is working in the upcoming week. Please fill out the sheet in a timely fashion – if we can get into a routine to planning your arrival times for the entire week before Sunday at 5 PM, then everyone's life can be a lot easier!
- If you are experiencing any of the following symptoms you will not be allowed to come to the campus: cough, shortness of breath or difficulty breathing, fever (>100.4°F; 38°C), chills, repeated shaking with chills, runny nose or new sinus congestion, muscle pain, headache, sore throat, fatigue, new GI (gastrointestinal) symptoms, loss of taste or smell, chilblain-like lesions (bumps or colored patches) on feet and hands. Students are expected to self-identify and isolate if they experience these symptoms; however, if you notice any of your peers demonstrating these signs, contact Wei and ask the person to leave the laboratory immediately.
- Also note, group meetings will still remotely occur via Zoom.



How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

- All communal locations (i.e. rotovaps, GPC, chemical storage cabinets, gloveboxes, THF still, TLC plate cutting board, etc.) will be marked with a sign (shown below on separate sheet) and a series of tape lines of the floor which demarcate 6 feet from the instrument/object. More on zones in later bullet points.
- Each person is required to wash their hands and have a fresh pair of gloves on – make sure to recycle gloves when you are finished! If someone is in a communal location, you are not allowed to enter that location until it has been cleared and sanitized.
- Furthermore, each location also has an ethanol or isopropanol spray/squirt bottle, which is used to sanitize the area prior to and after use.
- As noted above, the lab has been marked with zones in which only a single person is allowed. These zones are located in “high trafficked” areas and are designed to help remind/enforce proper social distancing. See images below:
- Note in image A, the middle rotovap area is closed off and only two to farthest apart rotovaps are in use (these are larger than 6 feet apart).
- Also in image B, some of the zones in front of the sink are visible – the separation is six feet, so if a person is washing their hands (as they are required to do hourly), that zone demarcates the social distancing guidelines.


A

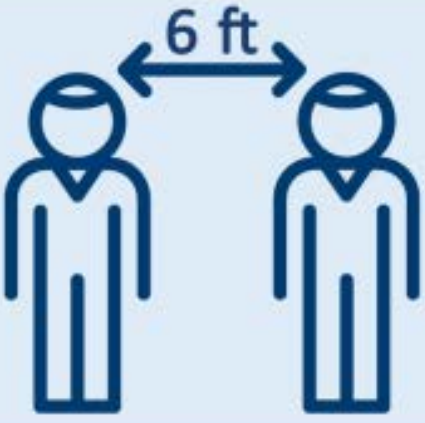

FIRST AID KIT
GLASS
ONLY ONE (1) PERSON ALLOWED IN THIS ZONE
B

WEAR A MASK
SAVE A LIFE

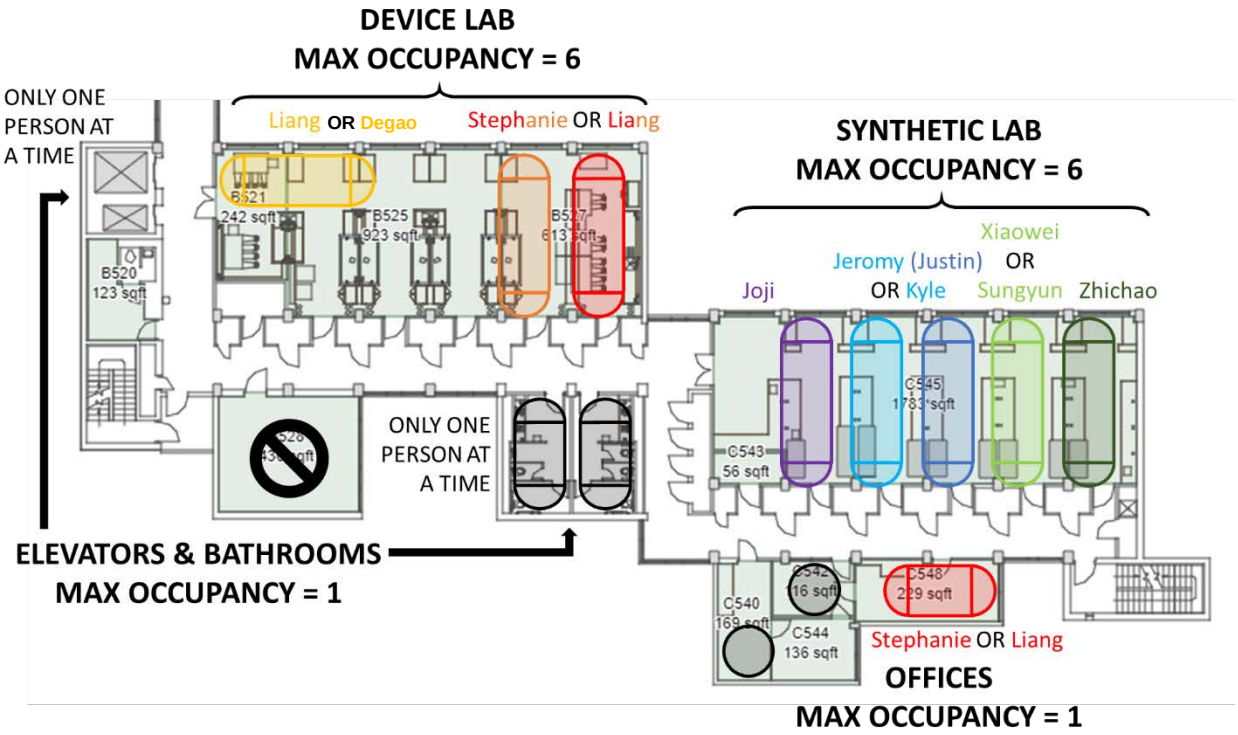
WEAR FRESH GLOVES
(RECYCLE AFTER)

FRIENDLY REMINDER

DO NOT ENTER THIS AREA IF SOMEONE ELSE IS PRESENT



Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing. Also, indicate the maximum occupancy for each room associated with your research program.



- The locations are marked here with the social distancing sphere radius (extended to oblong shape to fill entire lab bay). Because of the spacing of the laboratory, students can only work at alternating hoods. There are two shifts for working which rotate on a regular basis [weekly].
- Note - As Justin is a zeroth year graduate student, Jeromy must be present to supervise his work.
- Note – undergraduate students are not allowed to work during phase two, therefore, Noel is not allowed into the laboratory at this time.

- Rotation partners –
  - Synthetic Lab #1: Jeromy/Justin OR Kyle
  - Synthetic Lab #2: Joji OR Zhichao
  - Synthetic Lab #3: Xiaowei OR Sungyun
  - Device Lab #1 (B527): Stephanie OR Liang
  - Device Lab #2 (B521): Degao OR Liang

- Each shift lasts one (1) week. Example, Shift #1 will be working the week of June 29th.

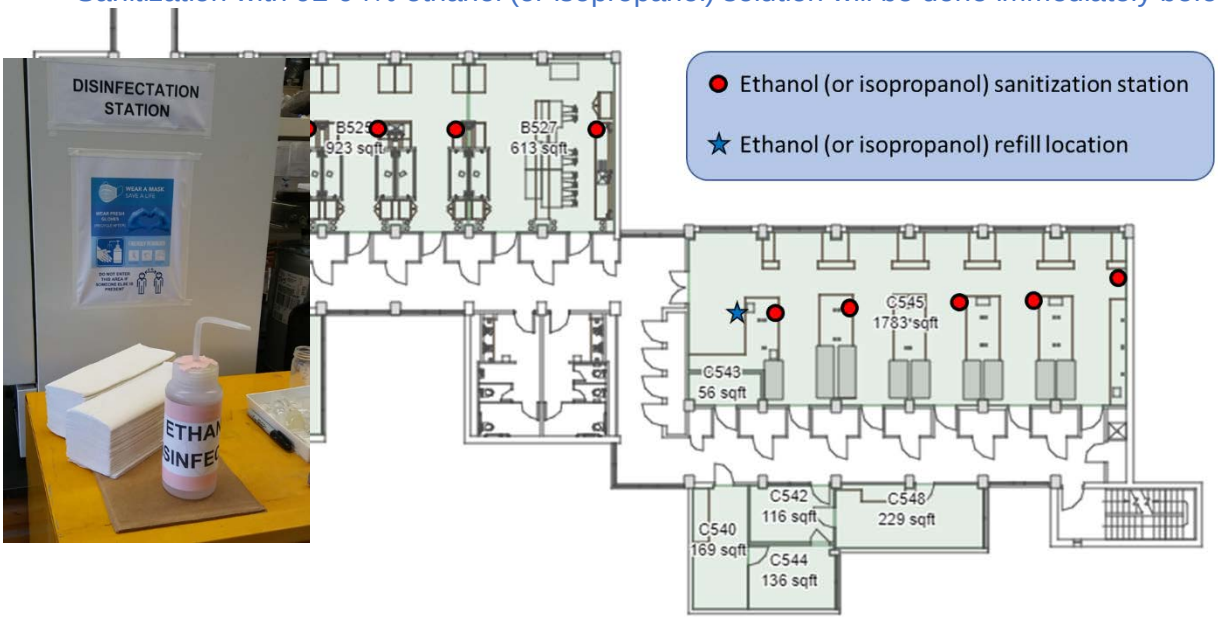
Include a plan and schedule for sanitization practices in your lab:

How often will surfaces be sanitized?

- Ethanol (or isopropanol) spray/squirt bottle are spread out throughout the lab in clearly marked areas. A map with the locations are included below. These are used to sanitize the area prior to and after use.
- Personal areas (desks, counters, etc) will be sanitized at the beginning (~9 AM) and end (~5 PM) of each work day. Furthermore, there entire laboratory is sanitized a minimum of 4 times a day. To help ensure this occurs, there will be cleaning scheduled for 10:00 AM, 11:30 AM, 1 PM, and 2:30 PM.
- There is a 20 L containers of both ethanol (and/or isopropanol) at the entrance to the synthetic lab (as this is close to both synthetic and device lab locations). This will be used to refill station for the squirt bottles as they are depleted.
- Please be courteous and refill the squirt/spray bottle if it is near empty. Jeromy will take care of ordering the 20 L replacements.
- The locations of each sanitization station (red circles) and refill station (blue star) are shown on the map below:

What is your protocol for sanitizing equipment?

- Sanitization with 92-94% ethanol (or isopropanol) solution will be done immediately before and after use (and at least four times while at work). Thorough surface cleaning will also occur at the beginning and end of a shift. Further details were provided in previous bullet points.



When will personnel wash and sanitize their hands while in lab?

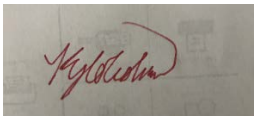
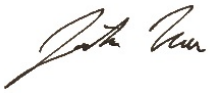
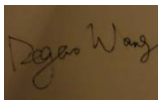
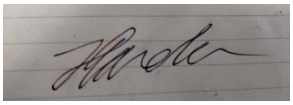
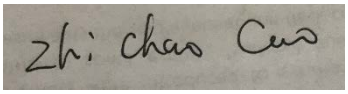
- Hands should be washed immediately upon arrival to lab and immediately before leaving. New soap containers are included at the majority of sinks in the laboratory.
- Wash and sanitize your hands **hourly** while on campus and always after talking with and/or handling material that was in contact with another individual.

What is your policy for wearing masks in lab?

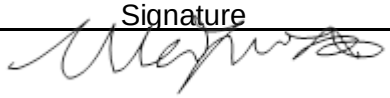
- Wet chemistry – Masks must be worn at all times. A standard 3-ply non-medical grade mask will be provided by the university and should be the primary mask work. This mask is expected to be reused several days in a row. If this mask is not preferred, the laboratory workers can also use their own provided N95 mask.
- If you would also like to wear a face shield (this is not a substitute for a mask, masks must still be worn), one can be obtained from Kenny Langley in BeAM (kenny@beam.unc.edu) – note, face shields must be sanitized with ethanol or isopropanol daily.
- Desk work – Any face-covering (i.e. homemade mask, bandana, neck gaiter, surgical mask, N95 mask, plastic face shield etc. which completely covers the nose and mouth, AND is approved by the university) must be worn at all times.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Jeromy Rech		**5/30/2020**
Kyle Cushman		**5/30/2020**
Stephanie Samson		**05/30/2020**
Xiaowei Zhong		**5/30/2020**
Justin Neu		**5/29/2020**
Liang Yan		**05/29/2020**
Degao Wang		**05/30/2020**
Joji Tanaka		**05/29/2020**
Sungyun Son		**05/29/2020**
Zhichao Cao		**05/31/2020**

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Wei You		**5/29/2020**

Zhukhovitskiy Group

Zhukhovitskiy Group Phase 2 Resumption of Research Operations

Last updated: May 26, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	5
# of postdocs	1
# of visiting scientists	0
# of undergraduate researchers	2

Detail your plans to maintain social distancing:

- ☐ How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.

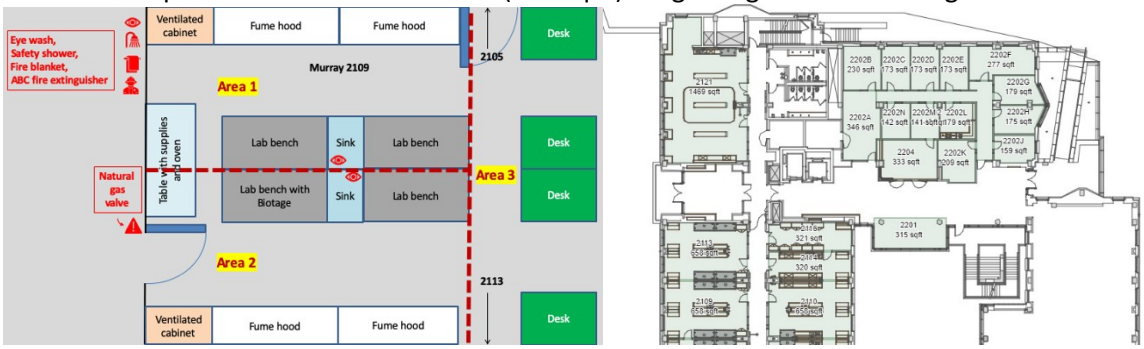
  Including me, there are 7 out of 9 group members expected to be working in the laboratory. For 50% occupancy, we will work in two shifts: morning (7AM till 2PM) and evening (2:30PM till 9:30 PM). Worker attendance will be logged in upon arrival in a dedicated notebook. No more than 4 people will be allowed to be working in the lab at the same time.

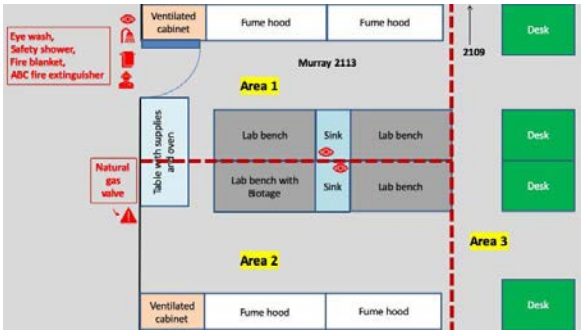
- ☐ How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments?

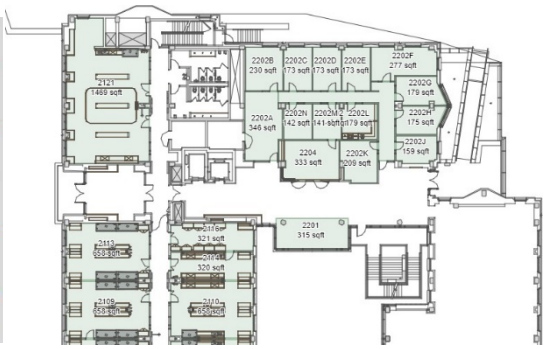
  Personnel will not congregate by any one instrument, and instruments will be spaced out to ensure social distancing.

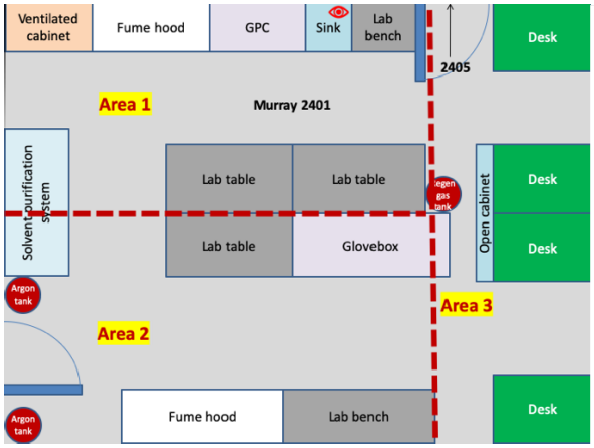
- ☐ Indicate the maximum occupancy for each room associated with your research program.
  1. Murray 2109 (658 sq ft.): 3 people
  2. Murray 2113 (658 sq ft.): 3 people
  3. Murray 2401 (723 sq ft.): 3 people
  4. Murray 2202J (My personal office): 1 person

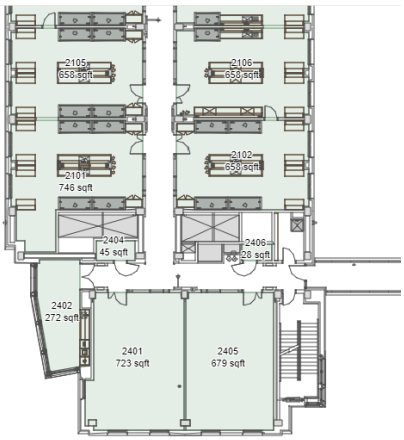
- ☐ Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.











Include a plan and schedule for sanitization practices in your lab:

- ☐ How often will surfaces be sanitized?

  Surfaces will be sanitized four times daily: at 12PM, at 7PM, and at the end of the shifts.

- ☐ What is your protocol for sanitizing equipment?

  Spray surface, allow 10 min contact time, and wipe down with 70% ethanol or equivalent disinfectant (e.g., Seventh Generation All-Purpose Cleaner (EPA Registration number 84683-3-86066), approved by the CDC to sanitize against SARS-COV-2 (https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2#filter_col1)).

- ☐ When will personnel wash and sanitize their hands while in lab?

  Upon arrival, after taking gloves off, every hour of their shift, and at the end of the day.

What is your policy for wearing masks in lab?

Masks are to be worn at all times in the lab.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Benjamin Kruse		05.26.2020
Rachael Ditzler		05.26.2020
Andrew King	Andrew J King	05.26.2020
John Drake Johnson	John Drake Johnson	05.26.2020
Joseph Collins	Joe Collins	05.26.2020
Maxim Ratushnyy		05.26.2020
Jozsef Toth	——— (undergraduate; will not be in lab)	05.26.2020
Elias Arroyo	——— (undergraduate; will not be in lab)	05.26.2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Aleksandr Zhukhovitskiy	A Zhukh	05.26.2020

Undergraduate Labs

Nita Eskew Group Phase 2 Resumption of Research Operations

Last updated: June 1, 2020

Submit a plan that details your group's policies for social distancing, shift work, sanitization, and maintaining a safe working environment to Ralph House (rlhouse@email.unc.edu). These policies will be reviewed and approved by the department Safety Committee.

Group demographics:

# of graduate students	1
# of postdocs	
# of visiting scientists	
# of undergraduate researchers	
# of lab supervisors	4

Detail your plans to maintain social distancing:

- How will you stagger work schedules to maintain ≤50% capacity and how will you log worker attendance? Be sure to stagger arrival/departure times by at least 30 minutes to reduce traffic in common areas.
  Currently, our reason to be on campus is to design/test experiments, test instruments, and/or prepare instructional videos related to UG lab courses. Currently, this work will be conducted in the Chapman demo room (102-104). Only two team members will be allowed to work in this area on any given day during normal business hours.

- How will you protect lab personnel in areas where social distancing guidelines cannot be met, such as between instruments? N/A

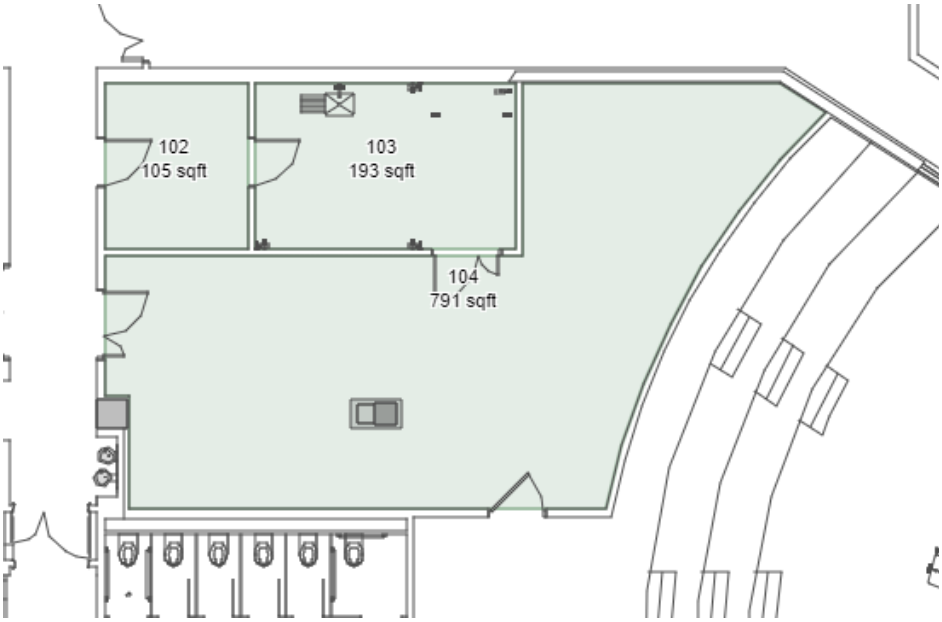
- Indicate the maximum occupancy for each room associated with your research program. Only two people will be allowed in this space at any given time. Room 102 is limited to one person at a time. In Room 103 there are rare times where two individuals will be in the room at the same time, but those times will be brief (enough time to start the camera) and individuals will remain 6 feet apart at all time. Room 104 max occupancy is two people and social distancing should not be a problem.

- Attach a floorplan with demarcated areas (200 sq ft) for guiding social distancing.

Include a plan and schedule for sanitization practices in your lab:

- How often will surfaces be sanitized? The work table in 104 and any bench or hood space used in 103 will be sanitized at the beginning and end of the shift and after each use. We anticipate this should average to around 4 times per hour.

- What is your protocol for sanitizing equipment? Use >70% EtOH or IPA to clean surface of hot plates or other instruments used to shoot the videos.

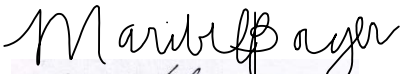
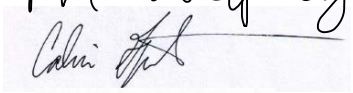
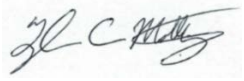


- When will personnel wash and sanitize their hands while in lab? Hands will be washed at the beginning and end of the work day. While working in the lab, disposable nitrile gloves will be worn and hands will be washed ever time gloves are changed, on average every hour.

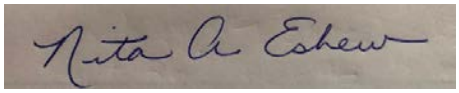
What is your policy for wearing masks in lab? A mask should be worn at all times while in lab.

On the following page please have every member of your group read and pledge, through their signature, their commitment for adhering to Phase 2 policy to help keep our community safe and prevent the spread of COVID-19.

By signing below, I pledge to adhere to the policies in my lab, department, and the broader University regarding measures to help prevent the spread of COVID-19 to protect myself, my peers, and everyone I encounter who is working under these difficult times.

Printed name	Signature	Date
Maribel Borger		6/1/2020
Calvin Grant		6/1/2020
Tyler Motley		6/1/2020
Kathleen Nevins		6/1/2020

By signing below, the Principle Investigator agrees to oversee the implementation of the policies set forth in this document and understands that violations of policy will be addressed through one or two warnings that will ultimately result in HR action and suspension of on-site research activity for either one individual or the entire group.

Printed name	Signature	Date
Nita A. Eskew		6/1/2020