

CNF Reactivation Training

This Training will cover the changes in CNF policies and lab protocols to mitigate the spread of Covid-19 and minimize any impact on the lab community.

This training is intended for Existing authorized CNF Researchers and is not a replacement to the CNF Orientation for new users.

If anyone has not gone through a CNF Orientation training, please contact the Users Program managers regarding a schedule to get trained.

Safety First

Safety of the Researchers and Staff are the top priority.

No student, postdoc, or staff member should be forced to return to campus to do work that can be accomplished remotely. In the event you feel forced or coerced to work, speak to your supervisor, manager, Graduate School, or HR representative

Any work that can be done remotely should be done off site

The CNF reactivated in a staged approach under the approval of phased guidelines defined by Cornell and the Office of Vice Provost for Research

- **CNF Phase 1-A** : Staff Only for 2+ weeks to restart and repair tools, restock supplies, setup new lab use protocols
- **CNF Phase 1-B**: Limited approved Cornell Affiliated local researchers working on Cornell projects approved for reactivation
- **CNF Phase 1-C**: Cornell grad researchers and post docs, local non Cornell affiliated researchers, regional non-Cornell Researchers

Current Operation Hours/Limitations

- As of 8/17/20:
 - 24/7 operating hours
 - No Team format for researchers
 - Cleanroom capacity is updated to 30 researchers and staff
- The CNF Offices, Break Room and CAD room will still be closed to Users.
- In order to keep distance Staff will be adjusting schedules to be on site approximately 60% of the time.
- **No new tool training or New User trainings will occur during this phase – it is expected that researchers will already be trained on the tools they need**
- ***If you need a tool and are not trained – contact the CNF staff for remote process support***
- No user guided visitors or user guided tours are allowed

* evening access is a privilege that may be revoked based on behavior

Access Requirements

- Cornell Research Projects must be approved to restart by the individual departments- defined by Cornell Research
- All Staff and Researchers are required to complete the EH&S “Return to Work Health and Safety Training” offered through CU Learn.
- Everyone is required to complete a daily check prior to showing up at campus and a CNF facility.

<https://dailycheck.cornell.edu/>

If you can't pass the daily self check or if you begin to feel ill/sick or experiences symptoms at work, you should leave the lab and immediately distance themselves from co-workers, contact their supervisor, leave work, and seek medical attention if necessary.

Daily Health Check

Will you be at any Cornell location today?

Yes No

Have you tested **positive** for COVID-19 within the last 14 days?

Yes No

Have you experienced any symptoms* of COVID-19 within the last 14 days

Yes No

*COVID-19 symptoms include: cough, shortness of breath or difficulty breathing, fever, chills, muscle pain, sore throat, new loss of taste or smell, and (less commonly nausea) vomiting or diarrhea. Fever is considered to be over 100.4 F or 2 degrees over your normal temperature.

Have you knowingly been in close contact* in the past 14 days with anyone who:

Has tested positive for/been diagnosed with COVID-19?

Yes No

Has or had symptoms of COVID-19?

Yes No

*Close contact is defined as being closer than 6 feet for more than 10 minutes

Travel Guidelines/Restrictions

- All researchers traveling from areas in NYS -excluding NYC- have no added restrictions for entry .
- Researchers coming from NYC or outside of NYS will need individual approval for each visit to the CNF and Cornell Ithaca campus
- Researches should follow NYS guidelines on isolation if traveling from “restricted” states.
- Cornell strongly discourages all unnecessary travel to minimize the risk of transmission.

Key Protocol Changes Summary

- Face coverings are required in all CNF spaces
- A new gowning protocol and common use surface disinfectant process has been posted
- Occupancy limits have been posted for the overall cleanroom, individual rooms and bays, and second floor labs
- Limited access to the CNF store (modified process)
- All Users will be required to purchase or provide their own Safety Glasses – no common use eyewear

Face Covering/Mask Policy

- The Cornell Research reactivation plan require all individuals in shared spaces or buildings to wear a cloth or surgical mask at all times, except when alone in a room with a closed door
- Duffield Hall requires face coverings inside the building
- The CNF requires face covering at all times inside lab spaces

Wear a face covering!

- *N95 mask use fall under EH&S Respirator Program and needs to be pre-approved (N95 masks use is discouraged to maintain adequate supply for emergency responders)*

Mattins/Atrium

- Mattins Café opened on 9/2/2020
- At that time the Duffield Hall atrium will operate as a “dining establishment”
- Face coverings are required until seated and can be removed while eating.
- Tables have been reduced to create needed separation

Face Masks are required at all times in the CNF Cleanroom and 2nd Floor Lab Spaces

If you are wearing a Surgical style Mask you can wear that in and out of the cleanroom without needing to change it.



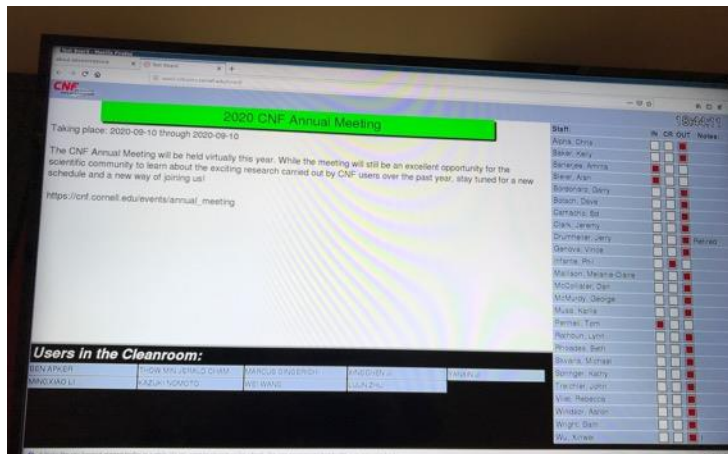
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If you have a fabric style personal mask, bandana, or similar you will need to change into a cleanroom surgical mask



Gowning Room Entrance Protocol

- Arrive at the Cleanroom, **only bring essential items** – use the coat rack outside cleanroom if needed
- If other occupants are there, maintain 6' distance
- **Cleanroom limit is 20 users plus staff before 5pm and 25 after 5pm**



2020 CNF Annual Meeting

Taking place: 2020-09-10 through 2020-09-10

The CNF Annual Meeting will be held virtually this year. While the meeting will still be an excellent opportunity for the scientific community to learn about the exciting research carried out by CNF users over the past year, stay tuned for a new schedule and a new way of joining us!

https://cnf.cornell.edu/events/annual_meeting

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Baker, Kelly	<input type="checkbox"/>	<input type="checkbox"/>	
Banerjee, Anura	<input type="checkbox"/>	<input type="checkbox"/>	
Bee, Alan	<input type="checkbox"/>	<input type="checkbox"/>	
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Carrasco, Ben	<input type="checkbox"/>	<input type="checkbox"/>	
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Malison, Melissa-Care	<input type="checkbox"/>	<input type="checkbox"/>	
McCallister, Dan	<input type="checkbox"/>	<input type="checkbox"/>	
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Schmitt, Kelly	<input type="checkbox"/>	<input type="checkbox"/>	
Treche, Justin	<input type="checkbox"/>	<input type="checkbox"/>	
Vick, Rebecca	<input type="checkbox"/>	<input type="checkbox"/>	
Winters, Aaron	<input type="checkbox"/>	<input type="checkbox"/>	
Wright, Sean	<input type="checkbox"/>	<input type="checkbox"/>	
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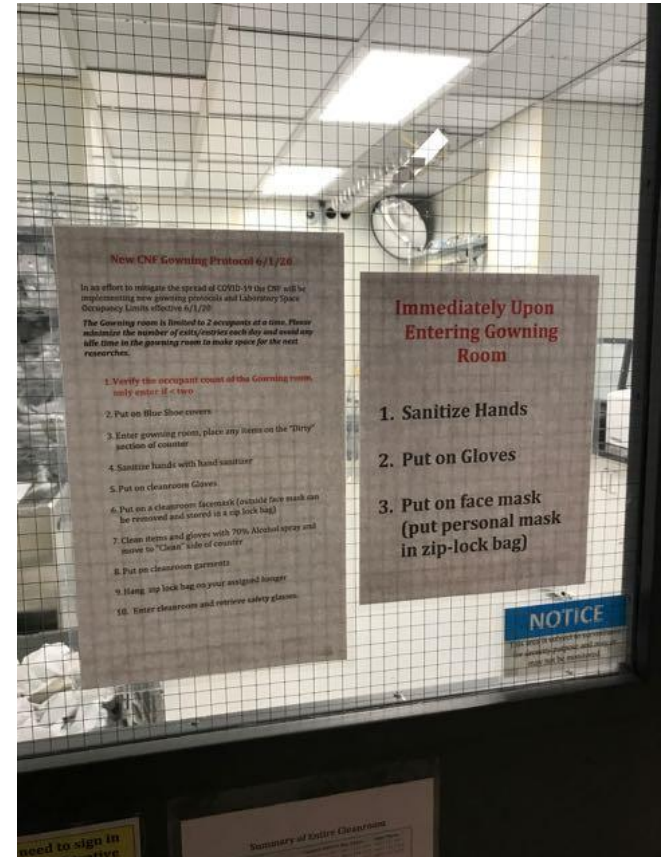
Users in the Cleanroom:

SEN APKOR	COO MERRILL, DAVID	ANDERSON, JENNIFER	ANDERSON, JENNIFER	ANDERSON, JENNIFER
MINKOWSKI	AGUIAR, MORGAN	WELLS, WANG	MULLER, JAMES	ANDERSON, JENNIFER



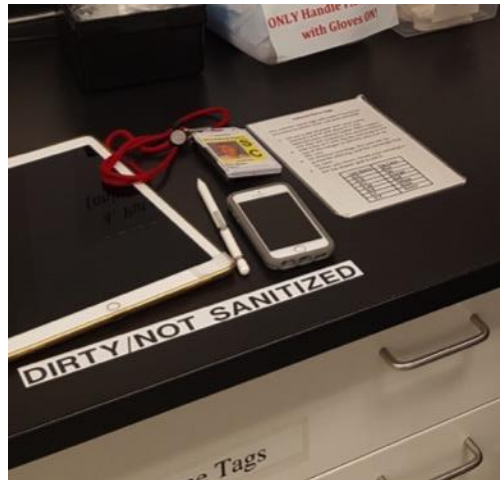
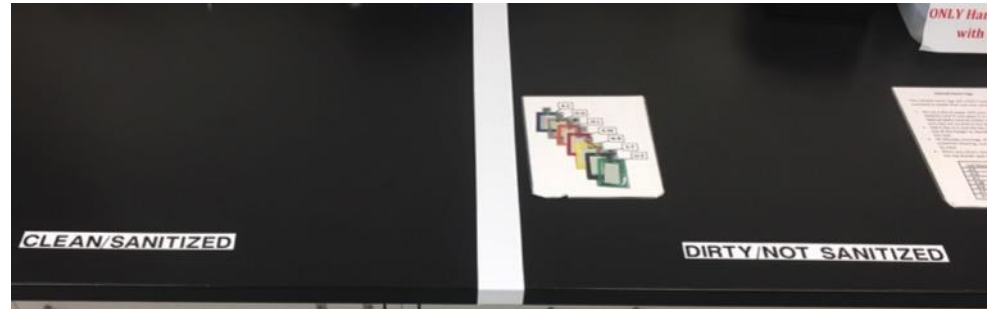
Gowning Room Entrance Protocol

- Verify Cleanroom occupancy is under **30**
- The Gowning room occupancy is limited to **3** at a time, wait until there is space in the room
- Put on shoe covers and enter the gowning room



Gowning Room Entrance Protocol

- Place any items on the Counter marked “Dirty/Not Sanitized”
- If you are wearing a fabric face mask, sanitize hands, remove and bag your mask



Gowning Room Entrance Protocol

- Sanitize your hands again
- Put on gloves
- Put on a surgical style cleanroom mask **ONLY WITH GLOVES!**





- Clean and Sanitize your belongings and gloves with 70% alcohol spray and wipes

- Move your belongings to the “Clean/Sanitized” side of the counter





- Put on a cleanroom suit, hang your bagged mask on your hanger
- Hangers are spaced out – spread out and put your hanger tag on the hanger
- Enter cleanroom and retrieve your safety glasses from the hooked bags

***The gowning room will be a bottle neck with reduced occupancy
do not linger, have conversations, talk on phone, etc.
keep the room clear!***

Safety Glass Storage



- Store Safety Glasses in mesh bags. Contact Phil Infante/Staff if you do not have an assigned hook.
- Do not use the hooks to hang anything other than the eyeglass mesh bags. Do not hang extra items on gowning hangers – **store in lab storage boxes**



In the Lab

- Social distancing is the most effective way to minimize spread
- Follow the area occupancy guidelines
- CNF is exploring “group/block reservations” to tie nearby tools together when reserving- *not implemented yet.*
- In the meantime, scan neighboring tools in Coral and sign up when nearby tools are not in use- **tools are being regrouped**
- 15’ Reservation “use it or lose it” limit is relaxed
- *Passing in the cleanroom and hallways does not violate social distancing, avoid lingering and direct person to person conversations*

NOTICE

**1 USER MAXIMUM
IN THIS AREA**

**Maintain 6'
Social Distance**

ORBITAL | orbitalenergy.com | 800-777-1300 | #124309-020

NOTICE

**2 USERS MAXIMUM
IN THIS AREA**

**Maintain 6'
Social Distance**

ORBITAL | orbitalenergy.com | 800-777-1300 | #124309-020

Bay and Area Signs



Adjacent tools and Hoods

- One users per hood
- Do not use adjacent tools
- **Maintain 6' min separation**



Area Limits

Cleanroom USER Total	20
Stepper Room (137)	3
Photo Spinning (121)	3
Contact Photo (133)	2
Mask Processing(117)	2
General Chemistry (131)	2
SEM Room (128)	3
JEOL 6300 (124)	2
JEOL 9500 (122)	2
Ebeam Spinning (118)	2
Central Processing (114)	2
Evaporator Hall (115)	3
Thin Film Short (111)	1
CMP/Dicing (111A)	1
Thin Film/Etch Long (107)	4
Furnace/ALD (103)	2
KOH/Electroplating (102)	1
Class II Resist (106)	2
West Process (110)	2

Second Floor Labs

Bio Lab 201	2
Outreach Lab 220	1
Wet Lab 224	2
Dry Lab 228	2

Surface Disinfecting

- 70% Alcohol/water spray bottles can be used for general surface disinfecting
 - Phones, keyboards, counters, etc
 - Follow tool manager guidelines on tool surface cleaning
 - Do not use on face shields – will damage/fog the plastic
- 3% H₂O₂/water spray bottles for use on face shields
- Hand sanitizer dispenser in gowning room
- Staff will do a general lab surface cleaning each morning, but researchers will be required to clean tools and PPE after use

Keyboard Disinfecting

- **Do not spray Alcohol directly on keyboards and tools**
- Spray onto a cleanroom wipe first then use that to clean the keyboards and mice



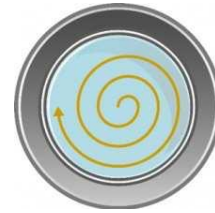
Microscopes and Sensitive Glass Viewports

After using microscope eye pieces or other sensitive optics, only use prepackaged alcohol wipes to clean lenses and surfaces – follow the posted instructions

Sanitize Microscope Before & After Use

Clean Eyepieces

- Open a 70% alcohol wipe packet and wrap the wipe around your finger.
- Wipe the surface of the eyepiece lenses and rubber gaskets (if present on eyepieces). Wipe from the center to the outside in a spiral pattern.



Clean Other Surfaces

- Open up the wipe and wipe down all other surfaces exposed to your breath or to your fingers.
- Starting at the highest point of the microscope, wipe frequently touched components, such as **focus knobs, imaging mode controls, hand-operated objective turret, and stage handles.**

Tips:

- Starting at the top and working toward the floor helps prevent particles from falling on already cleaned portions of the instrument.
- Wipe the surface in one direction, as wiping in a back and forth motion can create more particles.
- Use a different section of the wipe each time to avoid reintroducing particles.
- Keep safety glasses on and use live video camera image instead of eyepieces, if possible.
- **Do not put cleanroom wipes on the stage, they produce particles that damage devices.**

PPE Disinfecting

- Chemical hood Face Shield policy will require all users to disinfect prior to and after using Face Shields
- Only use supplied H2O2 disinfecting spray on face shields (alcohol will damage the face shields)
- Apron buckles, keyboards can be cleaned with an wipe and 70% alcohol spray

Face Shield Usage Policy

Disinfect → Use → Disinfect

1. **Spray with H2O2 disinfectant**
2. **Let sit for 60 seconds**
3. **Wipe off with lab wipe**

DO NOT USE ALCOHOL BASED SPRAYS!!!



Staff Support

- **Expect limited staff availability- will be 50-60% on site**
- Staff may utilize multiple ways to support researchers and tools and still maintain social distancing
 - Phone support
 - Face time/Zoom video calls
 - Schedule a time for staff to look at a tool
 - Remote access into tool computer (if supported at tool)
- Weekly tech sessions are done via zoom or phone – no longer in person drop in

Supplies and Store

- With limited staff, last minute supply restocking may take longer- your patience and understanding is appreciated!
- The staff will be accepting pre-orders on the store items that we can set out for users each day
- In person store orders should be limited to occasional emergency replacements

Before Exiting the Lab

- Make sure all wet chemical glassware and containers are disposed of and placed by the dishwasher
- Users will be charged for cleanup if they are left behind
- Store samples and masks in storage bin –do not leave out on counters
- Store your safety glasses in hooked bag

Gowning Room Exit Protocol

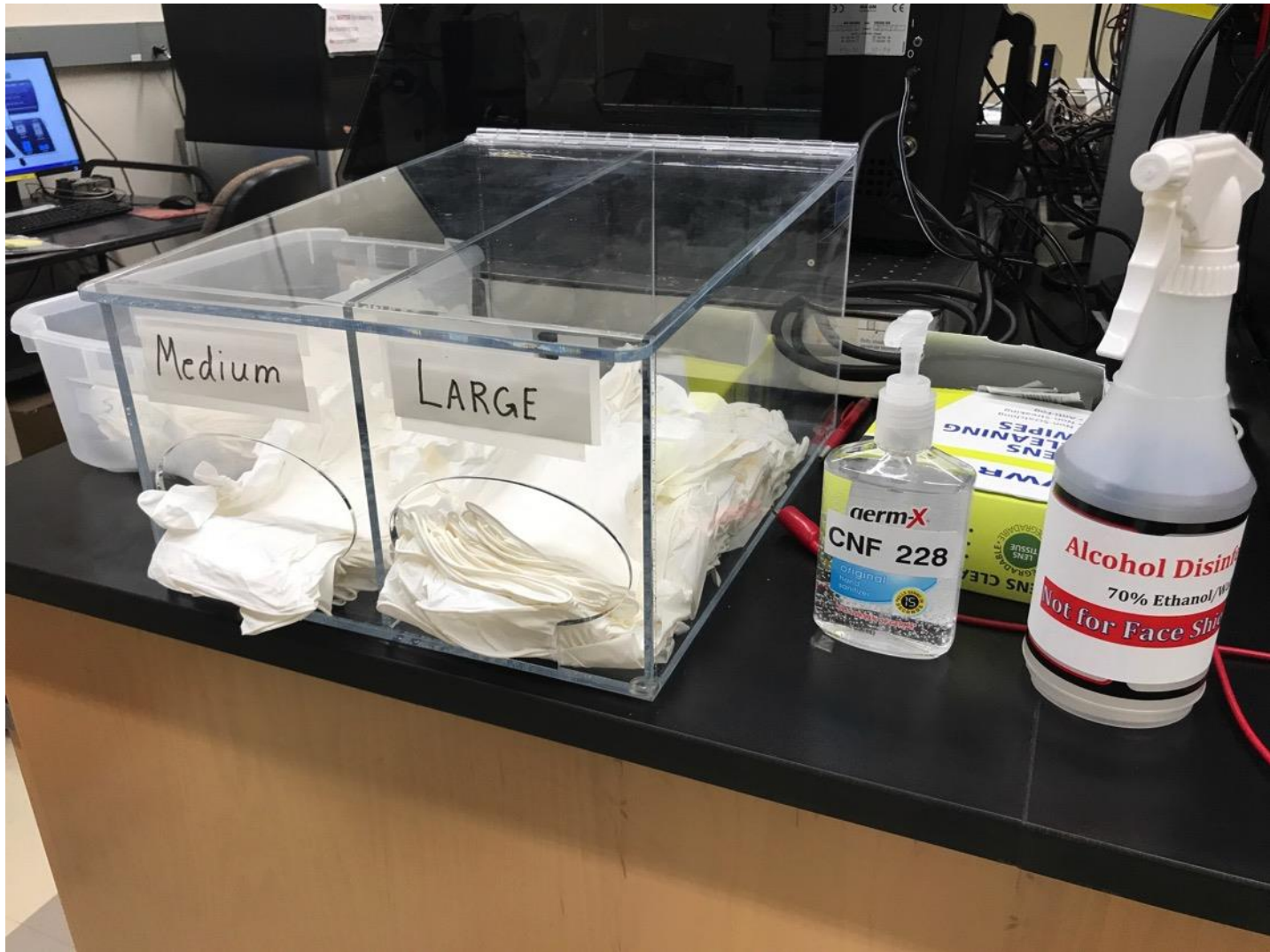
- Verify gowning room occupants are under 3
- Enter the gowning room and place any items on the “Out Table”
- **Leaving gloves on**, remove your cleanroom suit
 - *If returning to the lab later that day or week, hang your garment up and cover with a dry cleaning bag if desired*
 - *If it is the end of the week or if you will not be returning, remove your garment and place in the gray totes by the entrance door.*
- Take your Cloth mask bag and belongings and exit
- Sanitize your hands and swap your mask or keep your cleanroom mask on. (your cleanroom mask can be worn in and out of the cleanroom.)



2nd Floor Lab Entrance Protocol

- Verify occupancy limit on the lab spaces
- Users should be wearing a building required mask and can continue to wear that in the 2nd floor labs – it does not need to be a surgical style cleanroom mask.
- Users must provide or purchase their own safety glasses to wear in the labs
- Enter the lab, immediately sanitize hands and put on a pair of gloves.

2nd Floor Lab Entrance Protocol



2nd Floor Lab Exit Protocol

- When finished using the tool, sanitize any surfaces you touched according to the tool manager guidelines
- Gather your belongings and open the door, Keep your gloves on!
- While propping the door open with your foot, take off your gloves and dispose of them as you leave

Safety Glasses, Gloves and Face Coverings are Required at all times in the 2nd floor labs!

Summary

- **30 users plus staff max limit in cleanroom**
- 3 occupants at a time in the gowning room
- **Must maintain 6' social distance in lab spaces and outside gowning room** (i.e. one researcher per hood, one tool in use for closely spaced tools)
- *Extended hours past 5pm are conditional on lab behavior*
- **Normal CNF rules still apply!** (i.e. buddy at hoods, present in lab with plasma tools on)
- Dispose of all chemicals and store belongings before leaving
- Info and presentation is located on CNF Users web site

<https://www.cnfusers.cornell.edu/policies/covid-19>

- Expect Protocols to change as guidance from the State and Campus adapt!
 - Current protocols may be adjusted as we learn and adapt ourselves
 - Compliance is mandatory and will impact your access privilege to the lab!
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- ***First cleanroom entry needs to be during daytime hours***
 - *Entry this week → go ahead and enter*
 - *Entry next week or later → notify staff to get a refresher*
 - *2nd floor only users --> go ahead and enter*

If you Don't need to enter the lab to do any work – there is no need to enter to get trained then leave. Wait until you actually need to work in the lab.