

User Protocols for Nanofab Facilities Use

General

- 1) The facility is now open for regular 24/7 operation without shifts. You must be approved by the lab management before you are reauthorized to enter the facility.
- 2) You will be required to electronically sign an attestation stating that you have reviewed the [UCSB Covid Safety Presentation](#) and will abide by these protocols. Failure to follow these guidelines is grounds for suspension from the facility.
- 3) The Nanofabrication facility cleanroom uses ultra-high efficiency HEPA filtering for all of the air entering the lab and has an effective air exchange rate of 60-150 times/hour in all areas of the lab. This air flow in combination with appropriate mask use allows for higher density than other facilities. Please observe physical distancing of 3+ feet as much as possible while working in the facility.
- 4) Masks will be provided at the building entrance.
- 5) You must have a proper face covering/mask while working in the cleanroom at close distances. You must have safety glasses on at all times. Here are the options. We now have a couple of options to eliminate shields.
 - a) KN95 or N95 mask. We will supply KN95 masks. You cannot have facial hair where the mask seals to the face. Make sure the mask seals well.
 - b) Surgical style mask plus mask brace (to make the mask fit snugly to the face, no facial hair where mask is against face). We supply the surgical style masks, users must supply their own mask brace. We will evaluate a mask tightening plus nose bridge tape option as well to see if that works. Example of mask brace here: <https://www.safety.com/the-mask-brace-can-improve-your-masks-fit/>.
 - c) Surgical style mask plus PET faceshield. Surgical style masks are loose fitting by themselves. PET faceshields add additional barriers. We supply the PET faceshields.
- 6) Before coming to work, you must take the wellness survey. Register here using your UCSB NetID. https://ucsb.co1.qualtrics.com/jfe/form/SV_b1KUu3tXTGswQ1n. You must have a UCSB NetID. If you do not, contact the director. After registering, you will be sent a link to take a mandatory back to work COVID training and will be sent a daily link to the assessment.

- 7) If the survey says you are not cleared to come to work, you may not come to the UCSB campus. Contact your doctor and follow their instructions.
- 8) Do not come to campus if you have symptoms of COVID. See CDC for current list of symptoms. <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
- 9) If a close family member or people you have had close physical contact with (as defined by the CDC) is tested positive for the COVID virus, please quarantine yourself, call a health professional, and follow their directions.
- 10) If you test positive for COVID, notify the lab director immediately.
- 11) In all areas of the building and within all rooms, you must be wearing a mask and maintaining 6 feet of distancing between people.
- 12) Email Brian Thibeault and Mike Silva if you need precious metals. Give us your combination in the email and leave the box on the designated shelf in the gowning room hallway. **Please request metals needed for the weekend by Friday at 3pm!**
- 13) No users are allowed in the staff office areas. The conference room, refrigerator, and microwave will be unavailable to users at this time. These are reserved for staff use only.
- 14) Please keep personal items in your car or your on-campus office as much as possible
- 15) For using the dicing saw (Room 1147), please see the Dicing saw section below.
- 16) For QFI lab use (Room 1111), please see the QFI section below.
- 17) For Polishing lab use (Room 1113), see Polisher section below.
- 18) Bathrooms are unlocked during normal hours. You may use the outside bathrooms or bathrooms on the second floor. You must have a mask on and maintain 6 feet of distancing between people in the bathrooms. For after hours use, keys to the outside bathroom will be available on the table that contains masks.
- 19) In the event of emergency, you should follow all normal emergency exit protocols.
- 20) Sign up for a hangar spot as normal. Put your name on a piece of tape and attach to the hanger. You will clip the PET faceshield bag to the hangar to store your faceshield, if needed.

Using the Cleanroom

- 21) All normal policies and safety procedures must be observed during this time and always while using the Nanofab.
- 22) Keep 3+ feet of distancing whenever possible while masked.
- 23) As much as possible, please limit the time you are closer than 6 feet to other users.
- 24) Do not circumvent the masks/shields in order to talk.
- 25) If you touched your face, facemask or goggles, please disinfect your gloves with 70% ISO/DI that is located throughout the lab.
- 26) PET faceshields are provided to all users These are very lightweight and should be worn over facemasks and safety glasses. If you are using the surgical masks plus faceshield:
 - a) PET faceshields should be worn all of the time. If you are working alone at a tool, you may turn these faceshields sideways or backwards on your head. Otherwise they need to be over your face to down **below your chin**.
 - b) You may work 2 people at a time at wet benches. ALWAYS choose an empty bench first. DO NOT simply use an occupied bench because you like that one when another one is open.
 - c) Normal PPE must still be worn at the HF benches for safety. We now allow the PET faceshields to be used for HF bench processing. Keep faceshield below chin and do not put your head under/below the sash. Acid aprons are still required.
- 27) If using KN95, N95, or surgical plus mask brace (to make the mask fit tightly):
 - a) You may work 2 people at a time at wet benches. ALWAYS choose an empty bench first. DO NOT simply use an occupied bench because you like that one when another one is open.
 - b) Normal PPE must still be worn at the HF benches for safety. We now allow the PET faceshields to be used for HF bench processing. Keep faceshield below chin and do not put your head under/below the sash. Acid aprons are still required. You must put on a PET (or better) faceshield for HF work.
- 28) The acid benches should all have one person per bench unless all benches are first filled up, then two users may use a bench together. General acid work (non-HF) may be done at the plating wet bench if extra space is needed and other benches

are being used. Other HF acid (and general acid) work may also be done in the bay 4 bench (with full apron and PET or standard face-shield) if needed.

- 29) Normal PPE must still be worn at the HF benches for safety. We now allow the PET faceshields to be used for HF bench processing. Keep faceshield below chin and do not put your head under/below the sash. Acid aprons still required and one will be given to you if needed. We are still not sharing any PPE at this time.
- 30) NEVER lift your facemask up or down to talk. **Masks must remain on at all times over nose, mouth, and chin.**
- 31) If you need to sneeze or cough, bend down, facing floor, and do so into your elbow while leaving your mask on. If coughing persists, this may indicate an onset of symptoms of illness, please leave the facility immediately, report this to your supervisor and the director.
- 32) Each user requiring acid apron and standard face-shield for use at the HF bench will be assigned their own personal items. No sharing between users.
- 33) If you need to do a task less than 15 minutes in duration between uses at the HF benches, you may hang your gown up while you perform the task. If you will be away from the bench for more than 15 minutes, put away your acid apron. DO NOT walk around the lab with the acid apron on.
- 34) Safety glasses are required at all times in the cleanroom. Keep safety glasses on while looking into the microscope. Use the digital imaging if you cannot use the eyepieces with your glasses.
- 35) Fogging:
 - a) Use tape to make surgical mask fit better over nose
 - b) Anti-fogging spray on the goggles
 - c) KN95, N95, surgical plus mask brace much better against fogging since they are tight fitting and prevent air escape upward through the face to mask gaps.
- 36) SEM room. We have installed a full length curtain to break the room into two sections. One person at each SEM only unless permission granted for training.

Late Night Use

Additional procedures and protocols for night-time operation (10pm to 5am):

1. Users must take the wellness survey and be approved to enter. The wellness survey should be taken during the day before you enter for night-time work.
2. Users with more than 40 hours of total (cumulative) logged Nanofab time can use late night hours without formal permission. Users with less than 40 hours of total accumulated lab time must contact the operational director for approval.
3. A full lab camera monitoring system will be reviewed at times to verify compliance with both COVID and all other laboratory rules and procedures. Users found in violation of policies and protocols risk losing night-time as well as other facility access.
4. As during normal times, there will be no staff support for tool issues during the late night shift. Promptly use the "Report Tool Issue" button on the signummonkey tool page / email issues to nanofab@ece.ucsb.edu as during normal operating times. The emergency cell phone number is active and will still be answered for laboratory emergencies that may arise, as during normal lab operations.

June 15, 2021

Using the Dicing Room 1147, QFI Lab 1111, Polish Lab 1113

- 1) Users must remain masked and maintain 6 feet of separation between users, except for approved training sessions.
- 2) You must have gloves, mask, and safety glasses on at all times in the dicing saw room.