

Cleanroom Walkthrough training document

post-COVID-19 Orientation content

1. Certification of the lab for cleanroom is a rigorous demand
 - Cleanroom certification: discuss certification 1000 particles >0.5 micron size per cubic ft, airflow design, and specialized space. Outdoor air averages 2.6Billion of these size particles per cubic foot.
 - Below, we review how that impacts entrance and admissible supplies.
2. CLEANROOM PAPER Discussion
 - We use a specialized paper it is the only paper that is permitted in the cleanroom
 - polyester cellulosic blend created by heat processing so that it does not create its own particulates.
 - **Cleanroom materials are very specialized.**
3. Materials permitted in the cleanroom review (if not mentioned, assume **not** permitted)
 - a) [Review dress code](#) (no hoodies, no turtlenecks, no very dusty or fuzzy articles, be cautious with narrow heels)
 - b) If you have a fabric face mask, please switch to a provided face mask before entering cleanroom side.
 - Technology – phones, laptops, tablets, etc
 - a) you can take non-porous devices inside if properly wiped. (proper wiping reviewed below)
 - b) If porous case, remove or put in a zip-lock baggie.
 - c) Wipe off before going inside, using particle removing station described in virtual tour
 - d) Anything that fits in your pockets it can stay in your pockets – it is then contained for particulate
 - Handwritten note taking –
 - a) CR pens are in cups inside, only pen that can be used
 - b) Pens: filtered and low alkaline ink so it doesn't produce particulate while you're writing.
 - c) CR notebooks are \$15 or \$25, examples at lab.
 - d) two notebook types, hard bound is patent compatible, available for cost to PI
 - e) Quick notes can be jotted on CR wipes or on CR post-it notes
 - Sample carrying – how to bring things in/out of cleanroom
 - a) -Clear -plastic -sealing container (Tupperware/gladware, wafer boxes ok, or we can help)
 - b) Wipe off before entry every time (particle removal procedure reviewed below)
 - c) Use cleanroom grade foil for light exclusion (if you have light sensitive sample)
 - d) Some PI groups have a storage box in gowning area, which stays there
4. Login --
 - **Express login** – Select meaningful end time to ensure sufficient equipment access to complete your task
 - If entering Cleanroom without equipment use, log in to “CR – Clean Room” directly for the duration of your visit
 - a) This is our safety list: if an emergency occurs, we use this to determine who may be affected
 - b) Remember to log out of cleanroom too.
 - Use the [equipment availability check](#) tool to determine when the bay will become free, even if you don't have access to the equipment. This will assist with reservations.
 - **Remember to LOG OUT of all equipment when leaving** – email nfcfappeals@pitt.edu if you forget
5. Training
 - expires after 6 months of no use
 - Your first training and first time accessing the Cleanroom lab you must alert the staff member in advance of your training that it is your first access so they can assist you
6. Wrists off ground: when gowning, we need to keep wrists of the coverall off the ground, we will learn today.
 - Training staff will assist you with this on your first visit, please alert staff if it will be your first CR entry when you are scheduling for your training.

We have a pre-COVID dated [virtual tour](#) posted on our website to allow for instructions and location.

Gowning area photos, there are some organization changes as pictured:

- Cleanroom gloves– you **must** use cleanroom-provided coverings to enter cleanroom
- Order and method of putting on cleanroom coverings can be re-watched at the following link, please select the version appropriate for current mask mandates - <http://www.nano.pitt.edu/GowningMask>



- If any bins are found empty, extras are available above and/or below, labeled in clear boxes
- Particle removal supplies are pictured on tray of shelf



- Coveralls to be pulled down from over-head bins in appropriate size, stored in the bag

2. Cleanroom Specific Instructions - you may view these steps in action here: <https://youtu.be/xSRjov1jCQw>

- At the entrance, if you are wear a fabric mask you will change to a new mask, as provided.
- Inside gowning, while entering you will:
 - a) Place a beard cover or hood over top of the surgical mask. This provides both medical protection and particle protection.
 - b) Eye proection is required at all times inside the lab – please disinfect shared goggles before wearing them, or use one of the disposable face shields provided. You may also bring your own if you prefer.
 - c) Put on gloves from the red bins, based on the size you need
 - d) Put on shoe covers – be mindful of clean and dirty side of bench for this
 - e) Use the wiping station supplies to clean/disinfect any shared resources
 - f) From “General Use Gowning” select an appropriate size gown, put it on with consideration to keep wrists of the garment from touching the ground
- Exiting cleanroom:
 - a) Gown should be taken off at the “dirty side” of the gowning room and hung on a hanger
 - b) Place your gown on a hanger in the general use gowns area, and **zipper it all the way up**
 - c) Step to the “dirty side” of gowning by stepping over the bench, then remove other gowning supplies (head covers, shoe covers, gloves)
 - d) Please be careful that your surgical mask stays on when removing head cover items



3. EHS Required elements

- Fire alarm – Exit procedure, exit building and cross a street
- Show our specialty alarms -Gas and Exhaust failure - Exit Procedure, exit lab and stand at distance, alert us that it is going off.
- Show hydrofluoric acid treatment: supplies location and procedure review for HF emergency care
 - Enter the emergency wash station - 5 minutes, ensure water has access to any exposed area
 - Call Pitt police 412-624-2121 (This is programmed on speed dial: cleanroom phones are located at end of Deposition Hallway, past hood 1 and 2, inside EBL room, and at corner of main Cleanroom hallway.)
 - Treatment cream is on acid hood and in first aid kit - must be spread with acid glove or stick
 - Lastly, you must seek urgent medical treatment, please go to the Emergency Room to be seen
- Emergency exits –
 - If possible, go back out gowning: do not ungnown in case of emergency, exit fully gowned, and once safe, discard all gowning (no longer clean)
 - Show Emergency exit locations – alarm will sound, staff key required to close it back up.

Card and cleanroom activation to follow – contact NFCFadmn@pitt.edu if you experience any problems with access.