

Present:

UCM: Allison Costa, Bobbi Henderson, Trevor Hirst, Deb Wiebe, Marcos Garcia-Ojeda
SCB/GLP Team: Matt Pietras-SCB, Bryan Irwin-SCB, Martin Gicklhorn-GLP

04/07: Notes of Breakout Mtg. #2: HSRI (#52) Biological-Chemical Analysis Lab + (#54) Wet Air Lab
shown in bold italic text

1. High Level Programming Information:

A. General

1. Labs of this type are required in order to be successful in research grant applications
2. Location: The Biological-Chemical Analysis Lab and the Wet Air Lab should be in close proximity to each other. These labs should also be located near the (56) HSRI Clinical Exam-Sample Collection Rooms and reasonably close to the shared #61 Glasswash / Autoclave Room.
 - a. ***Ideally the Biological-Chemical Analysis Lab and the Wet Air Lab would be located adjacent to one another so there could be a sample pass-through connecting the two labs.***

B. (#52) Biological-Chemical Analysis Lab - (600 ASF)

1. NCPC (Nicotine & Cannabis Policy Center) Core Lab
2. Description: This Lab will basically be a Chemical and Biological Sample Analysis Lab. Samples will come from the #54 Wet Air Lab, the #56 Clinical Exam-Sample Collection Rooms and possibly also other sources.
3. Test Subjects: There will be no human test subjects or live animals that come into the lab.

C. (#54) Wet Air Lab - (500 ASF)

1. NCPC (Nicotine & Cannabis Policy Center) Core Lab
2. Description: This lab will basically be a Test and Sample/Data Collection Lab. No sample analysis will take place in this lab. This lab will not be a wet lab but should have a sink. Samples collected at this lab will be tested in #52 Bio-Chem Analysis Lab
3. Test Subjects: This lab will have human test subjects from the campus and the community, but lab does not need to be located on the 1st floor.

2. Specific Lab Requirements and Equipment:

A. Biological-Chemical Analysis Lab - (600 ASF)

1. Lab Module and Functional Areas: Room to be designed on a 10'-6" lab module and have some functional separations for Lab and lab support functions. ***(see also Program Sketch Plan):***

- a. Open Lab Area for general Biochemistry lab work
- b. Tissue Culture Room
 1. ***Separate TC room with differential pressure capability relative to Open Lab Area*** (DP relationship depends on BSL rating of Tissue Culture Room).
2. Lab Furnishings and Major Lab Equipment:
 - a. Fume Hood: ***One 5' Fume Hood was requested***
 - b. Sinks: ***2 sinks in open lab area*** (with Hot/Cold water and purified water). One sink in TC Room with same waters.
 - c. Lab Furnishings: Flexible/Reconfigurable lab tables/benches/base cabinets and storage. ***Center peninsula bench (see lab Program Sketch Plan) was preferred to be fully removable if users want to locate large equipment in that area***
 - d. Lab Equipment:
 1. ***Open Lab Area: One refrigerator, one -20 freezer, one -80 freezer, one floor-standing centrifuge and space for other benchtop and floor-standing analytical equipment to be added in the future (such as Mass Spec, GC, HPLC, etc.).***
 2. ***Tissue Culture Room: Two 4' Bio Safety Cabinets (unducted), one stack of CO2 incubators (and associated CO2 cylinders nearby), one undercounter refrigerator, one undercounter -20 freezer, bench/table space for microscope(s), water baths, and other benchtop equip.***
3. HVAC
 - a. As a wet lab, all areas of this lab are to have non-recirculated air.
 - b. ***Design for differential pressure capability between TC Room and the General Biochem Lab Area***
4. Plumbing
 - a. Lab Compressed Air
 - b. Lab Vacuum
 - c. No Natural Gas (there will be no natural gas piped to any labs in the building)
 - d. Purified water at all sinks
 - e. Hot/Cold water

- f. ***Specialty gases (Provide rack for CO2 cylinders for the incubators in the TC Room. Other specialty gases (cylinders) may be required in the future depending on equipment that will be located in the lab.***
- g. Emergency shower/eyewash device
- 5. Electrical:
 - a. General outlet density of on receptacle for every linear ft of worksurface.
 - b. Electrical as required for equipment
 - c. Standby power electrical for temperature-controlled equipment (refrigerators, freezers, incubators)
- 6. Lab Finishes:
 - a. Ceiling: Suspended Acoustical and washable
 - b. Walls: Painted Gyp Bd.
 - c. Floor: Heat Welded Sheet Vinyl or Resinous flooring

B. Wet Air Lab - (500 ASF)

- 1. Lab Module and Functional Areas: Room to be designed on a 10'-6" lab module and to be divided into separate rooms as follows (***see also Program Sketch Plan***):
 - a. Front / Waiting / Circulation Room:
 - 1. For waiting , access to test rooms, storage and worksurfaces.
 - 2. Researchers are here observing and managing tests during testing.
 - 3. This lab may also have an educational component and students from other classes may be toured through this room to watch the testing taking place in the test / sample collection room.
 - 4. Furnishings are to not look/feel too sterile but must be easily cleanable/sanitizable.
 - a. Provide storage cabinets for test / sample collection supplies.
 - b. Provide some worksurfaces and seating for both researchers and test subjects.
 - c. ***Some more comfortable faux leather furniture which is durable and can be wiped down may also be wanted as waiting room furniture***
 - 5. The room should be easily cleanable and sanitizable (no carpet and walls/ceiling should be washable).

6. This room to have a handwash sink and some adjacent countertop.
 7. ***This room should have a sample pass-through cabinet to the adjacent Biological-Chemical Analysis Lab (approx. 18"x18"x18" size).***
- b. Two Test/Sample Collection Rooms:
1. These rooms are to have a ***non-recirculated ventilation system*** to contain the smoke from smokers or vapers.
 - a. ***The ventilation system in these rooms is to be robust, have a high air change rate and have air diffusers located to flush the rooms of smoke effectively and quickly. Laminar airflow should be considered.***
 - b. ***After a room is used, the room is to have a smoke sampling system which indicates when the smoke has been exhausted/cleared to an acceptable level and is safe to enter (this may require UCM EH&S input).***
 - c. ***The room exhaust is to be filtered so the smoke is not exhausted out to the atmosphere of the campus. (Filtration is an "optics" is as the smoke is likely no more hazardous than exhaust from fume hoods in the building or in other buildings on campus).***
 - d. ***There was uncertainty about how to best protect a researcher (from smoke/fumes) that was in the room with a test subject (to take samples) while the test subject was smoking or vaping. Having a portable self-contained breathing apparatus available for the researcher in the room or designing the airflow such that the smoke/fumes would be contained in one region of the room were two ideas that were discussed. Having the test subject located in some type of fume hood within the Test/Sample Collection Room was discussed as a possibility but did not seem like a very appealing solution. More study of the HVAC configuration options are required for the condition of having a researcher in the room with a smoking/vaping test subject.***
 2. Furnishings in these rooms are generally to be flexible, reconfigurable and easily cleanable/sanitizable, ***however, having some more casual and comfortable faux leather or equivalent (faux leather (or equivalent) so it will not absorb smoke and can be wiped down) seating in one or both test/sample collection rooms is also preferred).***
 3. ***Windows with blinds or shades should be provided in wall and doors between the Sample Collection Rooms and the Front/Waiting/Circulation Room.***
- c. One small Consenting / De-brief room:
1. This space should be a small meeting room for 2-3 people.
 2. Finishes are to be office-like.

3. Lab HVAC:
 - a. The two Test/ Sample Collection Rooms should have non-recirculated air to capture smoke and vaping fumes/odors (*see also more detailed description of HVAC requirements for these two rooms above*).
 - b. *If it is uncertain that the smoke and associated odors will not be effectively contained to the two test rooms, consideration should be given to also not having recirculated air for the Front/Waiting/Circulation Room may also need to not have recirculated air.*
4. Lab Plumbing:
 - a. Hot/Cold water at sink
 - b. Emergency shower/eyewash device not required because chemicals are not anticipated to be used in this lab.
5. Lab Electrical:
 - a. Electrical on every wall of every room. Typically, at +18" from floor except at sink countertop.
6. Lab Finishes:
 - a. Ceiling: Suspended washable Acoustical Tile in the Front/Waiting/Circulation Room and consenting room. Painted gypsum board in the two Test/Sample Collection Rooms
 - b. Walls: Painted Gyp Bd. Test rooms to have good acoustical separation
 - c. Floor: Resilient flooring in Open Lab Area and Test Rooms. Carpet in consenting/debrief room.

3. General Core Lab (Q&A):

A. Function

1. Will these two labs function as a single core or will they be independent?
Response: Will function more like a single core with two functions.
2. Are labs staffed? By whom?
Response: By the researchers that bring in grants and use these rooms.
 - a. Is there any desk/office space required for staff and/or short-term lab users?
Response: Some seating/worksurface/workstation space to be provided in the Front/Waiting/Circulation Room of the Wet Air Lab.
 - b. Duration of time which the labs can be signed-up for?
Response: Unknown / To be determined
3. Where will test subjects be greeted?
 - a. Response: That is up to the researchers using the lab.

4. Will Bldg. lobby act as the waiting area?
 - a. Response: Could happen / To be determined

5. Will Wet-Air Lab have test subjects during evening hours or weekends?
 - a. Response: Could happen / To be determined

6. Are labs staffed? By whom?
 - a. Response: Initially the lab will be staffed by researchers using the lab but, down the road, it is possible that the Bio/Chemical Analysis Lab will become a fee for service center and have staffing.

 - b. Security: Labs to have card readers

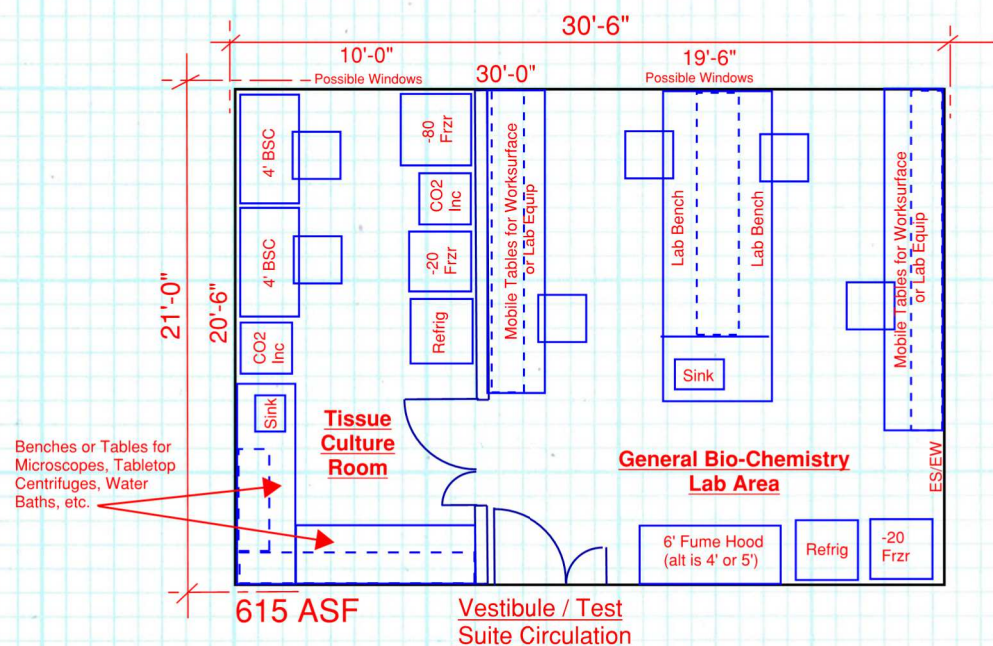
8. Natural light preferred?
 - a. Nat. light preferred for Bio-Chem Analysis Lab

 - b. Nat. light preferred for Wet-Air Lab ***Front/Waiting/Circulation Room*** only.

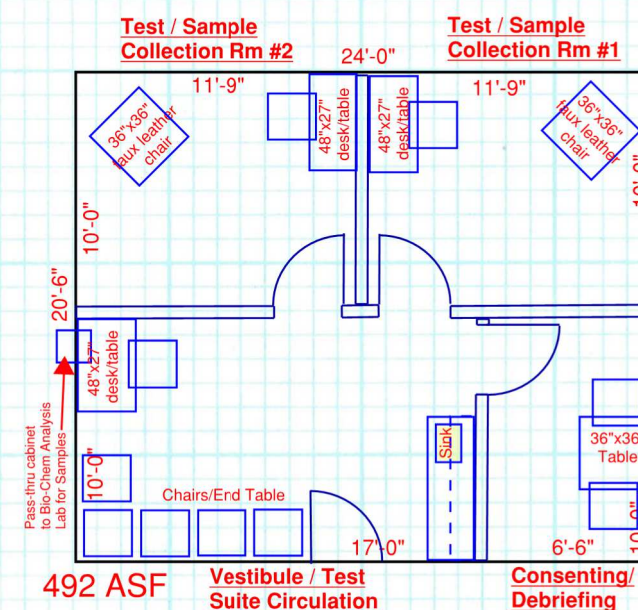
9. Interior Borrowed light wanted?
 - a. Interior glazing OK if no direct line of sight into Wet-Air Lab.

End of Meeting Notes

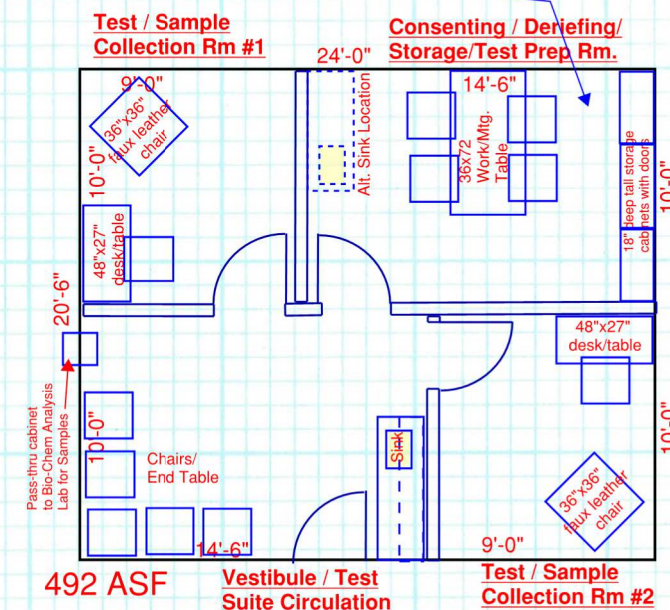
Note: This option, with the larger Consenting/Debriefing Room, could allow the sink and test prep storage to be located in this room



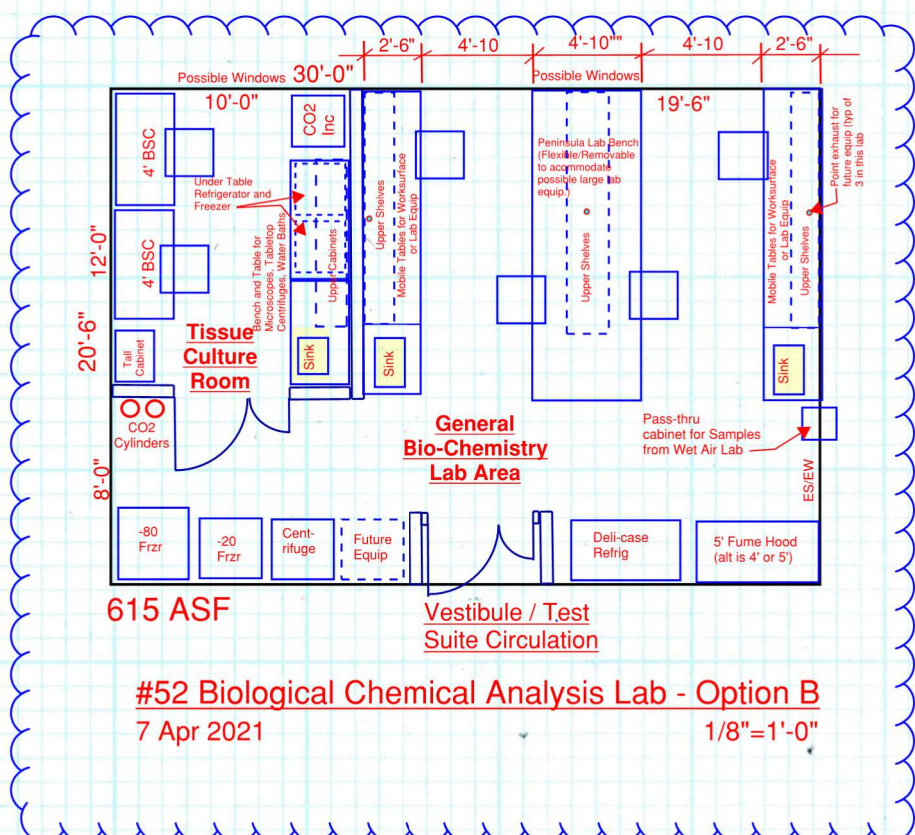
#52 Biological Chemical Analysis Lab - Option A
7 Apr 2021 1/8"=1'-0"



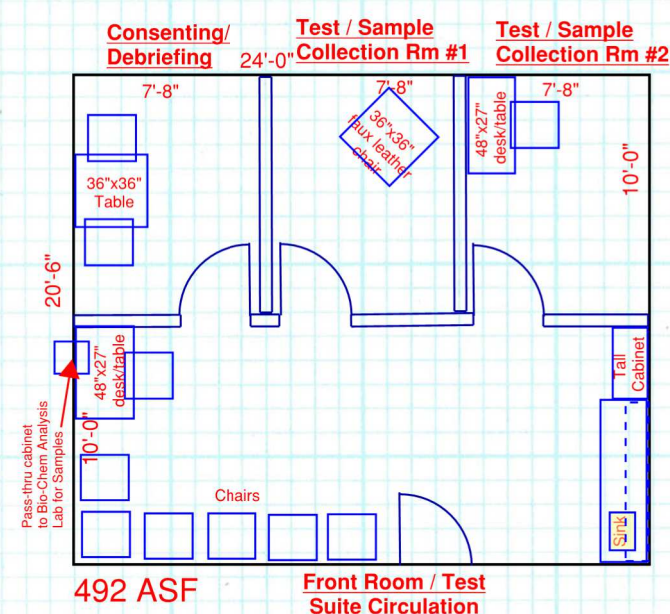
#54 Wet Air Lab - Option A
7 Apr 2021 1/8"=1'-0"



#54 Wet Air Lab - Option B
7 Apr 2021 1/8"=1'-0"



#52 Biological Chemical Analysis Lab - Option B
7 Apr 2021 1/8"=1'-0"



#54 Wet Air Lab - Option C
7 Apr 2021 1/8"=1'-0"

Although Option C was initially favored and Option B was not, no specific option was selected for the Wet Air Lab at the 4/7 Meeting. Mtg. Notes will be reviewed by HSRI and comments provided by 4/19.