

MOTION Science Institute COVID-19 Safety Plan

The MOTION Science Institute is comprised of 4 separate laboratory spaces including the Motion Analysis Laboratory, Neuromuscular Assessment Laboratory, Gait Biomechanics Laboratory, and the STAR Heel Lab (SHL). These laboratories are comprised of flexible data collection and data processing space.

Table 1. Capacity Allowances for MOTION Science Institute Laboratory Space						
			Updated 06-05-2020*			
	Flex Data collection/ Processing Space (sq.ft)	Max Capacity In Research Space based on Guidelines	Researchers Allowed to Collect Data in Space at One Time	Research Participants Allowed at One Time	Researchers Allowed on processing Computers at One Time	Total Number of People allowed in a Lab Space at One time [†]
Motion Analysis Laboratory (MAL)	2525	12	2	1	4	7
Neuromuscular Assessment Laboratory (NMAL)	1750	8	2	1	3	5
Gait Biomechanics Laboratory (GBL)	400	2	1	1	1	2
STAR Heel Lab (SHL)	1055	5	2	1	3	5
* These restrictions may be subject to change. [†] Please note in laboratory diagrams that distancing within the laboratory spaces must be maintained						

Numbers of Research Personnel	
Updated June 11, 2020*	
Doctoral Students	8
Masters Students	9
Postdocs	3
Research staff	3
Visiting Scientists	0
Undergraduate Researchers	24
Total	47
* Numbers may be subject to change.	

Social Distancing and PPE for Research Personnel

All research personnel must maintain a 6-foot distance between other research personnel and research participants at all times (except in *acceptable necessary close proximity situations*, as outlined below). This includes during data analysis, data collection, conversation and moving within the laboratory space and within Fetzer Hall (See prescribed pathways of movement within the laboratories). All processing computers have been positioned 6 feet away from other processing computers and data collection space, and should not be moved. All efforts should be made not to hand objects to other researchers or research participants. Objects can be placed on a surface for others to approach and pick up. Laboratory equipment setup must be configured so that individuals can collect data 6 feet from the research participant. We will not allow normal office desk set-up in the laboratory and work-from-home is encouraged when possible. Research personnel must wear PPE masks at all times.

Special Considerations for Social Distancing

Necessary Close Proximity Situations: If a researcher must violate the 6-foot social distancing guidelines for research purposes (See examples below), proper PPE (i.e. mask, gloves, face shield) must be worn and all efforts should be made to complete the necessary tasks and resume the 6-foot social distance as soon as possible. There should never be more than 1 research personnel violating the 6-foot distancing guidelines at one time.

Acceptable Examples of Necessary Close Proximity Situations

*** Not all possible examples of “Necessary Close Proximity Situations” are listed below. Please discuss potential for distancing with your faculty mentor as novel situations arise. ***

- Marker, Device or Electrode Placement
- Positioning on Dynamometer or Other Equipment
- Blood or Ultrasound Collection
- Alter Speed of Treadmill
- Collection of Patient-Reported Data
- Medical or Safety Concerns
 - If the participant experiences an adverse event or situation related to exercising or fluid collection that threatens his/her health and safety, researchers may be required to be within close proximity to ensure safety. Examples of these include physical support of a subject who is dizzy or may fall during exercise or performing an initial assessment in the event of an emergency and if needed, performing basic first aid and CPR (assumes appropriate training and certifications). It is important to remember that mouth-to-mouth artificial ventilation is not required in the event that a mask is not available. Masks will be available in the laboratory for mouth-to-mouth artificial ventilation.

Training of Research Personnel: In the case that there is a need to train research personnel on laboratory methods, 3 research personnel can occupy the MAL, 3 personnel can occupy the NMAL, and 2 research personnel can occupy the GBL. All previous social distancing guidelines apply.

Visitors: A single visitor is allowed in the research space in addition to the appropriate number of research personnel and the research participant during data collection as long as the occupancy restrictions for the space are not violated (See table above). Please note that this should be indicated to the research subject over the phone or by email and the researcher should plan for the extra visitor. These visitors may consist of the parents or companions of the research participants. Visitors must undergo the same screening as the research participants outlined in the EXSS policies and procedures and observe the PPE and social distancing guidelines. No visitors can occupy the GBL but a chair could be placed in the hallway outside the windows for the visitor to sit and watch.

Scheduling and Documentation of Scheduling of Laboratory and Laboratory Equipment

- All processing computers, equipment and space will be reserved on a first come first served basis using online laboratory calendars (previously in place).
- In addition to computers, space and equipment, the names of all the research personnel who will be working on the equipment must also be indicated online. The number of people signing out equipment at one time should not exceed the research space capacity indicated above.
- Reservations should be made with a 30-minute buffer prior to and after the session to ensure one way traffic into and out of the laboratory.
 - For example, if a subject is scheduled for 10am-12pm; the reservation should be for 9:30am-12:30pm.
 - Thus, only the research team assigned to that time slot will enter and exit the lab during those times.

- All research personnel should sign in and out of the lab on the clipboard provided in the front of each laboratory. Research personnel must indicate that appropriate screening has been conducted on all research personnel and participants prior to entering the space per EXSS policies and procedures. Additionally, the names of all research personnel, research participants and visitors should be documented for each operational hour to allow for contact tracing if necessary.

Personal Protective Equipment

- Anyone on campus must wear a face mask, including both research personnel and subjects/participants.
- Upon arrival to the lab, you will be provided with a University supplied face mask.
 - This face mask will last 2 days. Please store in an appropriately marked paper bag.
 - There are important and specific procedures for using and re-using masks to avoid contamination.
 - 1) **MUST WASH HANDS** or use hand sanitizer both before and after putting on your mask
 - 2) Loop elastic over your ears. Pull it down so it is covering under your chin; secure it to your face by pinching over your nose. Be sure it's on securely.
 - i. After securing mask, put on gloves, if interacting with any other human (i.e. subjects, students).
 - ii. Remove gloves.
 - iii. Wash hands
 - 3) Before removing the mask, clean your hands.
 - 4) Remove the mask using the ear loops
 - 5) Inspect to be sure it can be reused. Has it been compromised? Is it wet? Visibly soiled? If it is, dispose in the appropriately labeled bins (not the trash or biohazard containers). If the mask is ok to reuse, follow the next steps.
 - 6) Fold the mask in half (lengthwise or widthwise), so the outside surfaces are touching each other. Place it carefully into your paper bag. Seal the bag if you're using paper; if using a plastic baggie, leave it open.
 - 7) Perform hand hygiene.
- Between subjects, masks can be re-used yet new gloves are required.
- Gloves must be removed prior to using the restrooms.
- No eating is allowed in the laboratory

Special Considerations for Additional PPE

- In addition to masks and gloves, protective eyewear (not prescription glasses) must be worn when possible exposure to bodily fluids (i.e. sweat, blood, saliva) may occur.
 - For example, face shields should be used during research activities such as maximal exercise assessments when subjects cannot feasibly wear PPE.
- Wearing a laboratory coat is also recommended.

Before Arriving to Campus:

Symptoms Monitoring Check

- All faculty, research personnel, and trainees must conduct a daily review of COVID-19 symptoms before returning to work. At this time, those symptoms include:
 - New muscle aches not related to another medical condition or another specific activity (i.e. exercise).

- Feeling like you may have a temperature of greater than 100.0°F? (If so, take temperature).
- Sore throat not related to another medical condition (i.e. allergies)
- New or worsening cough that is not related to another medical condition
- Shortness of breath that is not attributable to another medical condition
- Recent (<5 days) loss of smell and taste
- New onset of vomiting or diarrhea not related to another medical condition
- Repeated shaking chills not related to another medical condition
- Anyone who is experiencing any of the above symptom(s) must not come to campus.
- Persons exhibiting COVID-19 symptoms should contact their health care provider and act upon their instructions. UNC employees may also contact the University Employee Occupation Health Clinic (919-966-9119), and UNC students and post docs may contact UNC Campus Health (919-966-2281).

Individuals should notify their direct supervisor and Laboratory Director.

- Any individual who has tested positive for COVID-19, who has been referred for testing or who is awaiting test results, may not come to work on campus for any reason until approved to do so by Employee Occupational Health or Campus Health.

Arriving at Laboratory:

- All faculty, research personnel, trainees and research subjects must enter the building and laboratories at designated entry points.
- All screening procedures should be completed prior to entering the building.
- Proper PPE will be worn prior to entering the building and laboratories by all.
- Movement through the building and laboratory spaces should maintain proper designated flow to allow for 6 feet of social distancing.
- For Human Subjects Research Procedures, see ***EXSS COVID 19 Human Research Policies***

Sanitization Practices for the MOTION Science Institute

Cleaning and Disinfecting Equipment

- The laboratory space and equipment will be carefully cleaned and disinfected prior to and following each data collection session.
- Checklists for each piece of equipment will be adhered to/placed next to equipment, with initials required for each cleaning before (check required) and after (check required) use.
- All researchers and subjects will be required to wash their hands during the following situations (but not limited to):
 - i. Before and immediately following data collection sessions
 - ii. After using the restroom
 - iii. Face touching or any situations where contact occurs without appropriate PPE
 - Glove disposal and/or any hazardous waste will follow Environmental Health and Safety regulations for biological and chemical waste disposal policies.
- When soiled with bodily fluids, gloves and masks must be disposed in red biohazard bins.

- If not soiled, but used in contact with a subject, gloves will be disposed in other designated bins.
- Masks will be reused for 2 days.

Cleaning and Disinfecting the Laboratory and High Touch Surfaces

- Shared surfaces of the lab will be cleaned 3 times per day (e.g., desks with data capture or processing computers. (Gloves will be worn nearly all day, so this is extra precaution).
- A checklist will be provided for the cleaning the following surfaces:
 - Entrances and exits
 - Door handles and cabinet handles
 - Desktops, benchtops, work surfaces
 - Chair backs and armrests
- Hand tools (pipettes; spray bottles)
- Markers, electrodes and leads
- Light switches
- Pens/Writing utensils
- Sink handles
- Keyboards, displays, tablets, mice

For MOTION Science Institute Research Personnel

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 _____

For MOTION Science Institute Principle Investigators

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 _____

Motion Analysis Laboratory

Active Data Collection



Designated Foot Traffic Flow

1



Entry

2



3



4



Exit



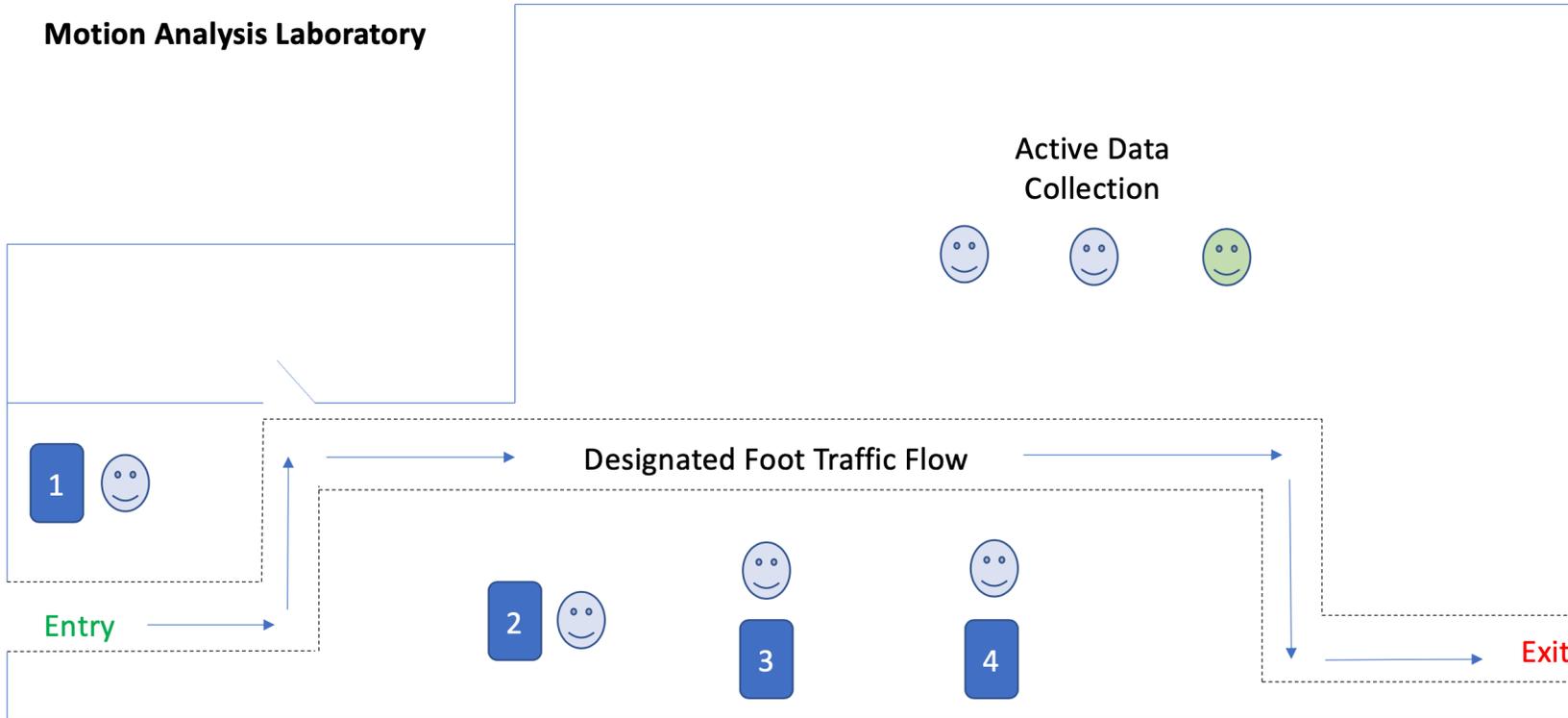
Processing Station



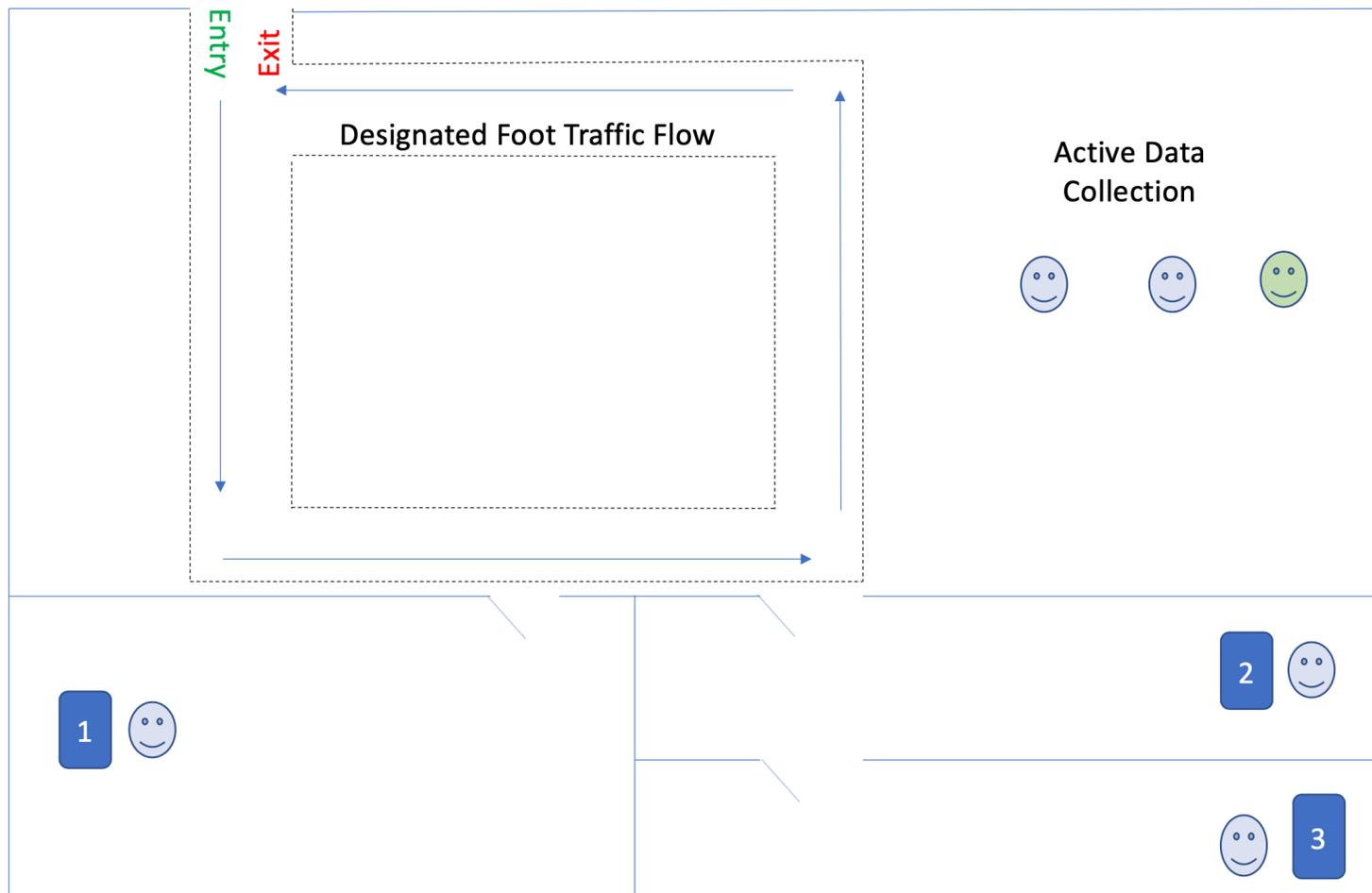
Research Personnel



Research Participant



Neuromuscular Assessment Laboratory



Gait Biomechanics Laboratory

