



Center for Advanced Molecular Imaging Return to Work

Greetings CAMI users,

By now you have probably received multiple emails regarding return to work guidelines and policies for the university as well as individual cores. This document is specific to CAMI and will highlight differences between general university policies and safety requirements at CAMI. Safety will take priority over service and instrument availability.

CAMI has consulted with several core facilities across the country and was part of the task force that developed guidelines for reopening core facilities. The rules discussed below are based on guidance from this task force and are designed to keep you and CAMI staff safe. We will be as transparent as possible, keeping in mind that we will err on the side of caution. As is stated in the [Return to Research Policy](#), all community members are empowered and expected to play an active role in protecting their health and the health of others.

Non-compliance with these new rules will be handled based on the guidelines from the return to work task force. If you do not have a mask before entering CAMI, one will be provided. In cases where masks become unavailable, you will be asked to leave the area and return when masks are available. In cases where a user is not following core-specific guidance (e.g. lab safety protocols, maximum occupancy, social distancing, etc.) CAMI staff will request compliance. If the user refuses to leave when requested, don appropriate PPE needed to ensure the safety of lab occupants, or comply with directions of CAMI staff the Core Managing Director will be notified.

The Core Managing Director will request compliance or ask the person to leave the core. If this fails, the Core Managing Director (in consultation with the Faculty Director) has broad latitude to impose sanctions for violating lab safety protocols, and will escalate issues to Tom O'Halloran, director of CLP.

There is a three-phase approach to reopening core facilities.

Maintain 6 feet (2 meter) distance as much as possible. CAMI will use the Microsoft Teams chat feature to assist users while maintaining social distancing. A "contact CAMI" icon will be on the desktop of each computer. That will initiate a chat window with all CAMI staff, who might be working remotely.

In all phases, masks are required in the lab area. 3-ply surgical masks have always been required when working with animals. Face coverings are required in the CAMI lobby and corridor near the offices. If the supply of surgical masks is disrupted, work with rats may be postponed due to allergies. Following Office for Research Safety (ORS) guidelines, good hand hygiene is necessary to reduce the spread of COVID-19. Gloves are not to be worn outside of the lab space and should not be worn in common areas. If you attempt to enter CAMI with gloves on and you are not actively transporting animals, you will be asked to remove your gloves.



The supply chain for many items, not just PPE, has been disrupted by the pandemic. CAMI's nuclear imaging service is especially vulnerable to supply chain issues, as radioisotope delivery depends on the supplier, courier, and staffing of radiation safety at Northwestern University.

Core Phase 1: Recovery.

CAMI will transition from essential only projects to projects put on hold due to the stay-at-home order. During this time, CAMI will be recalibrating instruments and establishing measures for physical distancing. This should be completed by 12 June, 2020.

Core Phase 2: Limited Service.

In Phase 2, all services will be available with restrictions aimed at maintaining physical distancing, with the exception of new user training. Training for the IVIS Spectrum and the Cell Culture room will become available after a remote method is established.

Occupancy limits for rooms and areas are shown in Figure 1. When scheduling the cell culture room or the IVIS, allow 10 minutes between reservations. We will not allow back-to-back reservations. Note that staff will work from home when possible. If you need immediate help, a chat using Microsoft Teams will be the best option due to poor cell phone signal in the lab. Data throughput during phase 2 will likely be slower as we adjust to the new working conditions.

High touch areas, such as doorknobs, will be cleaned four times per week by the janitorial staff. CAMI staff will disinfect keyboards, computer mice, tabletops, and chair arms in the lobby (daily, if possible). Users may request ethanol and paper towel if they wish to clean up before and after their use of the lobby workstations.

Pre-pandemic cleaning procedures remain the same for the cell culture room and IVIS area, and include disinfection of all surfaces and benchtops. Email CAMI staff if you need clarification. The one exception is that we now recommend leaving gloves on when using the IVIS acquisition system.

We have established a contactless sample drop-off area in the CAMI lobby. Make sure you arrange a drop-off time with CAMI staff 1 day in advance. If your sample needs refrigeration, make sure you request a Styrofoam container if you do not have one.

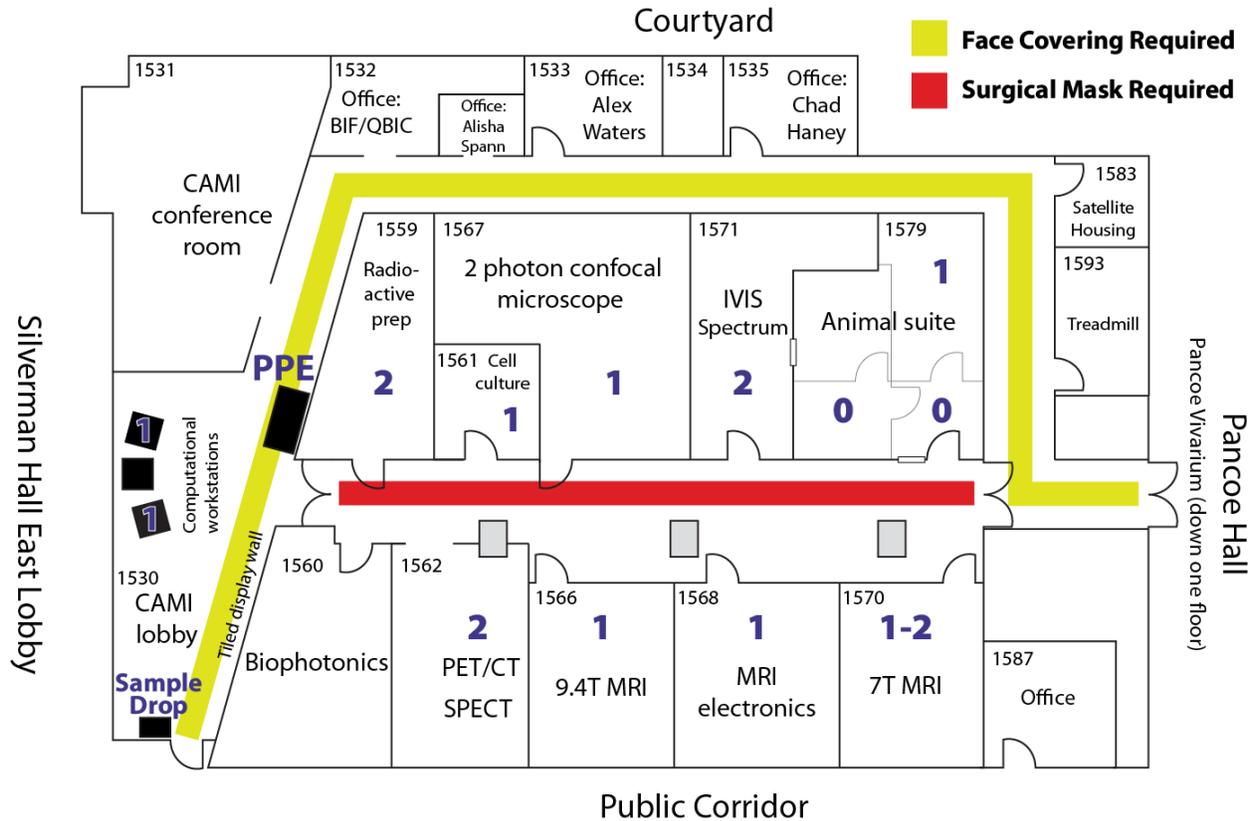


Figure 1 Floor plan with occupancy limits per room/area.

Core Phase 3: Expanded Service (new normal).

In phase 3, restrictions may be eased. Guidelines from the state and local levels will likely change and CAMI will adapt accordingly. The main anticipated change in phase 3 is availability of remote training.

Details for Services and Instruments

Self Service

Cell Culture Room

Allow 10 minutes between reservations. Only one person per session. Cloth masks can be used. If you need to retrieve something from the refrigerator/freezer while someone is at the hood, open the door and ask if the user is OK with you accessing the refrigerator. As before, gloves are provided and should be used. Users are required to use ethanol to clean the sash handle, chair, and benchtop. Spray ethanol onto paper towel then wipe. Do not spray ethanol onto surfaces as it could aerosolize virus particles and spread them. Remove your gloves and wash your hands



with soap and water. As noted above, training will not be available for new users in phase 1 and 2.

IVIS Spectrum

Allow 10 minutes between reservations. Limit two people per session, maintaining 6 feet separation as much as possible. 3-ply surgical mask must be used. When working with animals, a lab coat is still required. You should drop off your lab coat at the Safety office frequently to be laundered. Disposable lab coats are available in the vivarium if needed. As before, gloves are provided and required. We now recommend that you keep your gloves on when using the keyboard and computer mouse.

As before, users are required to use ethanol or clidox to clean the benchtop. Ethanol should be used on the keyboard, mouse, IVIS handle, isoflurane vaporizer knobs, and oxygen valve. Do not use clidox on or in the IVIS. Spray ethanol onto paper towel then wipe. Do not spray ethanol onto surfaces as it could aerosolize virus particles and spread them. Make sure you close Living Image and log out before you wipe the keyboard and mouse. After returning your animals to the vivarium and cleaning up, remove your gloves and wash your hands with soap and water in the IVIS room. As noted above, training will not be available for new users in phase 1 and 2.

Lobby workstations

The two workstations in the lobby have been moved to be 6 feet (2 meters) apart. Only one person per workstation. Allow 10 minutes between reservations. Face covering is required. If you need to consult with a colleague while using the workstations, you should use Microsoft Teams or Zoom. Do not use gloves at the workstations. If you have gloves on, remove them when you enter the CAMI lobby. Office for Research Safety policy is that gloves are to be used only in labs, and are not a substitute for hand washing and/or hand sanitizer. Training and support will be handled remotely.

Procedure rooms 1573 and 1575

No procedure rooms will be available in phase 1 and 2. There is no way to efficiently maintain social distancing while allowing people to enter the connected rooms. A new procedure room is being set up that will allow scheduling with social distancing in mind. The only exception to this policy is that the CO₂ euthanasia station will be available for use (one person at a time).

Vivarium (room 1579)

Ideally, only one person should access the animal facility at a time. CCM will allow 2 people in 1579 if one person is using the biosafety cabinet and a second person needs to quickly access the rat or mouse cubicle. If you do need to access the rat cubicle while someone is working, please be aware that the rat cubicle is only 3 ft from the biosafety cabinet. Please ask the person at the biosafety cabinet for permission to access the rat cubicle while they are working and move as efficiently as possible. The mouse cubicle is 6 ft away. However, you should still work quickly to access the mouse rack.



Full-Service

In phase 1 and 2, scheduling could be more difficult and turnaround times for data could be longer. Maintaining social distancing for CAMI staff may reduce efficiency. However, safety will take priority. Data quality will not be compromised. Samples and reagents should be dropped off at the contactless drop-off point in the CAMI lobby (see above for details).

MRI

Please make every effort to schedule your MRI experiments at least one week before you need your scans. Do not begin your animal procedures (e.g., tumor inoculation) until your schedule is confirmed. Training of new users is suspended for the foreseeable future. This policy may be revisited in phase 3, depending on conditions at that time.

Nuclear Imaging (PET/SPECT/CT)

Due to radiation safety concerns we continue to offer nuclear imaging as a service only (no training). Delivery of radioisotopes has changed during the stay-at-home order. Nuclear imaging services may not be fully operational in phase 2, due to supply chain issues with radioisotopes or PPE. Additionally, the Radiation Safety office at NU only permits ordering and working with radioisotopes if they have sufficient staff on site to handle an emergency.

Optical Imaging

CAMI will continue to offer full-service bioluminescence and fluorescence imaging.

Image Analysis

Innovative image analysis and visualization will continue to be offered in all phases. In accordance with state and university guidelines, CAMI staff will work remotely when possible. Therefore, turnaround times for image analysis will be longer in phase 1 and 2. However, CAMI was fortunate to hire an Assistant Core Scientist just before the stay-at-home order. As we transition from phase 2 to phase 3, we anticipate that image analysis turnaround times will actually become faster than in the pre-pandemic period.