User Safety Plan for Beckman Institute/Imaging Technology Group/Visualization Lab

Group name: Imaging Technology Group, Visualization Lab

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We work with graduate students, postdocs, professors, technicians, undergraduates, and industry. We train prospective users in person and work with them face-to-face to image and visualize their research samples and data. Our UIUC-based users have 24-hour access to the Vis Lab computer lab and Studio. The users utilize an online calendar system to schedule time on the various computers and visualization equipment. Some support equipment doesn’t require utilization of a calendar system. Traditionally many users work in close proximity to one another in the computer lab and studio. Teamwork is essential to the nature of research that is conducted in the Vis Lab. This may change so that two or more users do not come in at the same time to work with the same instrument.

The Vis Lab computer lab comprises ca. twenty workstations on the 5th floor. The Vis Lab studio, situated in B650G, inside the Microscopy Suite, comprises two highspeed cameras, one 3d scanner, and multiple still photography cameras, as well as many lighting and grip equipment, three workstations, and two laptops available as portable equipment.

Starting March 16th when the Beckman work-from-home order began, we began converting all the Vis Lab computers into virtual workstations, accessible via the Citrix workspace. We removed physical access to the 5th floor computers by disconnecting mice and keyboards and locking down the Studio. The physical workstations are situated on tabletops in a 5th floor common area. The Vis Lab computers are entirely virtual at this moment, so that any of the Vis Lab users and staff with internet connection can access them from home. This allows the Vis Lab computer users to continue computational visualization research work from home while maintaining proper stay-at-home procedures. The Vis Lab computers can remain virtual as long as needed and we do not foresee opening up the 5th floor computer lab until it is safe to do so in the future.

The Vis Lab studio in room B650G:

Large high-ceiling space containing high-end cameras, light setups, high-speed video 2 million fps, etc., houses shared equipment that traditionally may be used in B650G, or checked out and taken offsite by any of the Vis Lab users. An online calendar system is used to reserve and coordinate this equipment. However, to keep our users and staff safe, we will limit the use of the Studio to one user per piece of equipment given they can maintain social distancing, and follow the specifics outlined below.

The Vis Lab 5th floor Computers:

As noted above, the large open space on the fifth-floor houses 13 workstations, which are remotely accessible via the Citrix virtual workspace. Few users require physical access to this space, and primarily can work on the computers virtually. However, we will make three computers physically available to users who have no other option or need to use these computers in person. The computers will be positioned at least 6 feet apart, with one chair per workstation keeping users socially distanced. The Vis Lab users will be able to reserve a time slot for each physical computer through the ITG website. This will help prevent unnecessary contact between users in the computer lab space. Each workstation will have a protective plastic cover over the keyboard. ITG will also provide disinfectant, and each user will be asked to wipe down their workstation at the end of each session. A large monitor will be placed at one end of the computer lab so that users may project their computer desktop in case they’re meeting another person in the Vis Lab space and they need to social distance while collaborating on projects. This will help keep users social distanced while seeing the same information on screen. The ten workstations remaining, that are unavailable for physical access, will have no chairs, mice, or keyboards to clearly show their unavailability.

Specifics of Covid-19 Area Plan:

None of our staff can work fully remotely. The Microscopy Suite and the Vis Lab make up the two components of the Imaging Technology Group. We share a business administrative analyst (Teppie Apperson), whose single office is on the fifth floor, with Travis Ross (single office on the fifth floor). Teppie handles our billing, web pages, ordering, and delivery, as well as the same for Travis. Travis runs the Vis Lab, on the fifth floor, has made all the computers there accessible remotely, and also runs the Vis Lab Studio, which is inside the perimeter of the Microscopy Suite. The Vis Lab Studio cannot be rendered remote.

Shift work, as in sharing the same facilities at different times, is not fully doable, as each microscopist and the facility manager oversee different instruments. Tape markers can be placed after consultation with the Beckman Administration. Internal hallways are narrow, and establishing separate entrances and exits is not fully doable.

Cleaning Strategy:

Our prime strategy is to keep the instrumentation clean by having our users work with nitrile gloves that we will provide. They will be disposed of as the user exits the room or the Suite. All users and staff will be required to wear facemasks. We will have boxes of full-size Kimwipes readily available, with squirt bottles of 95% ethanol or 100% isopropanol nearby. That will permit cleaning of door handles and light switches. To ensure that the oculars (eyepieces) on microscopes that use them are clean, we are purchasing a stainless-steel UVC light chamber (permitting ultraviolet germicidal radiation); after each user operates a microscope with oculars, the oculars will be removed, sterilized using short-wavelength UV light, and replaced. Rubber or plastic ocular liners will be removed and thoroughly wiped with ethanol or isopropanol.

The doors to most instrument rooms are card-swipe accessible. This lessens the amount of manipulation of a given door. On the inside, the door handle must be turned down, and we expect that to be performed using a wet Kimwipe and/or gloves.

Another component of the strategy is to permit only one person in each room at one time, with some exceptions.

Users who have already been trained will be allowed in once they are aware of and acknowledge the new rules.

Training new users often requires that the trainer and the trainee be just a few feet apart. We can both wear PPE and try to keep our interaction as brief as possible, but other than that we do not have a reasonable plan.