

## Safety Measures of the IDDRC Cellular Imaging Core

The IDDRC-CIC is a communal space where researchers are invited to share the instrumentation we provide. In light of Covid-19, the Cellular Imaging Core looks to continue providing such resources while ensuring the safety of all its researchers. Therefore, we are implementing the preventative measures below to address the fact that this particular corona virus can be spread by researchers who are otherwise asymptomatic.

### New policies:

#### Physical Space and Signage:

To ensure physical distancing, we will use both doors to the core, with the door with the card reader as the entrance ONLY, and the double doors in the back of the core as the exit ONLY. Tape marks on the floor will indicate the direction of travel in the core. Moreover, directional signage indicating distance information shall be affixed to the floor for reference.

We ask researchers to put on fresh gloves (provided from your lab) once you enter the core and use gloves at all times while in the core.

Signage of required PPE will remain at each instrument bay. A copy of these safety guidelines will also be available at each microscope and image analysis workstation.

#### Disinfection:

Researchers are responsible for sanitizing relevant high-touch areas of the microscope before each use and after each use of the booked equipment.

To this end, all users will be trained on how to disinfect the instrument they will be using before and after their session. They will be required to watch the relevant cleaning video because **it is essential that they know what parts of each instruments can be cleaned by ethanol, and importantly, which parts of the microscope can be damaged by exposure to ethanol. Therefore every user must be trained before they can resume using the instrument.**

Videos of instrument-specific cleaning directions will be available for viewing. Videos will also be accessible via the IDDRC-CIC website, under the QuickLinks header, in the Cleaning Protocols Video tab.

Squirt bottles containing 70% ethanol will be placed by each microscope station. These bottles will be refilled daily, but refills are available upon request. Additionally, staff members will provide a digital 'User-Cleaned' log, located on each instrument computer. Researchers must record that they wiped down the high-touch areas of an instrument before exiting the bay. This log will list researcher initials and date/time for cleaning. If a researcher enters a bay and the site is not in an acceptable condition, core staff should be informed (via email or phone) in order to track down the last person assigned at the location.

*Basic disinfection procedure:* 70% ethanol is to be sprayed onto a tissue (kimwipe or paper towel, depending on the surface) then wiped across surfaces. All-use paper towels will be made available at the sink, while kimwipes will be made available at the location of each instrument. Ethanol is not to be sprayed directly onto instrumentation. Videos links will be accessible on the IDDRC-CIC website page, under QuickLinks header, in the Cleaning Protocol Videos tab. A hard copy of the protocol of how to clean and operate each instrument will be available by each instrument, and also as a digital document on the associated computer (along with the pre-recorded video).

Staff members will use saran wrap to cover high-touch areas as much as possible (keyboard & mouse, control knobs) allowing them to more thoroughly disinfect & wipe down all surfaces on each instrument (keyboard & mouse, eye-pieces, control knobs, other control modules on the instrument, & the desk & table surfaces) with 70% ethanol once a day.

### Trainings:

In phase 1 of reopening, only previously trained researchers will be allowed to use instruments in the core.

### Core Usage (Bookings, Cancellations, and 'After hour' usage):

The CIC is staffed during business hours (M-F, 9a-5p), but bookings are permitted 23h/day for trained researchers (1 hour blocked off for cleaning). As such, iLabs bookings anytime after hours or on weekdays are for researchers who have extensively used the core instruments after-hours previously, and who have been explicitly approved by core staff as 'After-Hour Authorized'. This occurs on a case-by-case basis and researchers should not assume they are authorized users. Researchers permitted to use the facility after-hours are required to prearrange a lab-directed 'Buddy-System', and will provide/update this information upon request of the CIC. Moreover, if specific 'add-on' items are needed from the core for after-hours use, then the researcher must request such items from either of the CIC staff by email at least 24h before intended use.

### Instrument relocation:

To maintain social distancing, certain equipment will be relocated within the core. This includes physically moving instrumentation and/or making a service exclusively available via remote access. The CIC will announce relocation changes via email, informing users of the planned changes before they occur and again after they occur.

### Staff Availability:

The CIC will have one staff member physically on BCH campus from 9a-5p Monday to Friday to help researchers troubleshoot issues that arise with the equipment (see below) and to disinfect all the instruments at the beginning of the day. The core will open to researchers after cleaning (from 9-10a), and instrumentation is unbookable at that time to allow staff to perform daily morning disinfection of all instruments. Staff will no longer be in the office space in CLS 13-035 in order to maintain social distancing. But one staff member will be located in the CLS 12-145 and available for troubleshooting virtually. This staff will be reachable via email or phone.

### Troubleshooting:

There will be a new protocol for troubleshooting in the case a researcher runs into problems during imaging. The CIC staff on duty will be in CLS 12-145 during business hours. Researchers in need of help will call or email and the CIC staff on duty will respond & collect as much details as possible, so that the staff can pre-assess what is needed to troubleshoot.

In the case of a software issue, each microscope computer has Zoom installed, and core staff will initiate a remote Zoom meeting for the researcher to share the screen. This allows for remote troubleshooting.

In the case of a hardware issue, the staff will acquire as much information as possible from the researcher by zoom, and then may ask the researcher to leave the facility while the staff member comes to the instrument and troubleshoots the problem. Any further communication will be done via phone/Zoom. Once the problem is resolved, staff will leave the core and inform the researcher to return to the core and continue their session via phone/Zoom.

### Contacting CIC staff:

In order to maintain social distancing, email and phone are now the primary means of contacting the CIC staff for general inquiries, incident reports, consultations, etc.

Assistant Director: [cvic.innocent@childrens.harvard.edu](mailto:cvic.innocent@childrens.harvard.edu)

Multiphoton Manager: [osama.alturkistani@childrens.harvard.edu](mailto:osama.alturkistani@childrens.harvard.edu)

CIC phone number: 617-919-2378

### **What the Cellular Imaging Core will do:**

1. Keep and restock liquid soap and paper towels at the CLS13-035 sink location.
2. Place 70% ethanol at each microscope station in CLS13-035 and Enders SB-0068. This is in addition to other supplies (KimWipes, lens tissue, oil, etc).
3. Have clearly marked EXIT-only and ENTRY-only doorways. This means that if more than one person wishes to enter the CIC at the same time, please queue approximately 6' away from each other to enter. Moreover, directional signage indicating **direction** shall be affixed to the floor for reference.
4. Our main locations are equipped with ceiling-dropped black out curtains, and so 1 researcher is allowed within said barriers, at a time. Brightly-colored tape on the floor will mark 6' distance between instruments for areas with more than one instrument. Moreover, in the case of a bay having two instruments, usage of the equipment will be restricted by the core staff to a staggered schedule, to ensure only 1 researcher is in the bay at a time.
5. Core staff will disinfect all high-touch surfaces in the core **once a day** with 70% EtOH. A sign will be posted in each workstation reminding researchers that all touchable surfaces (keyboards, computer mice, eyepieces, focus knobs, joysticks, stage-top incubators, etc) are possible means of transmitting SARS-CoV-2. These surfaces are all considered 'DIRTY' and gloves are required.
6. Booking will be the responsibility of the researcher. Please note that After-Hour use of instrumentation requires permission from the CIC, and also requires the 'Buddy System'. Moreover, it is the explicit responsibility of each researcher to arrange the 'Buddy System' when using the core after hours. See *Usage* above for details.
7. Core staff will archive any reports, concerns and repeated incidents of unsafe behavior (anonymous reports included). Please see *Contacting the Staff* above for details.
8. A laminated copy of this safety protocol will be available at the sink and at all instrument bays. Please consider this copy DIRTY. It is also available online. Please see *Contacting the Staff* above for details.

### **What we ask you as an individual researcher to do :**

1. Researchers may reference a laminated copy of this safety protocol at any time. One can be found online and a physical, laminated copy is also available at the sink, located in CLS 13-035.
2. Facemasks will be provided at the entrance of the Center for Life Sciences (CLS). Gloves are provided by individual labs. As such, wearing a facemask and gloves are mandatory PPE for entrance into any of the CIC locations. These masks must cover both the nose and mouth of the wearer, completely. Gloves must be on both hands.
3. All hard surfaces are considered, and should be treated as 'DIRTY'. Therefore, gloves and face masks are required when using equipment. Please discard & replace the face mask or gloves if torn.
4. Wipe down working surfaces and equipment before and after each use with the 70% ethanol provided within each bay. No other cleaning agents are permitted besides those made available at the bay (alternative

cleaning solutions may have abrasive compounds and may corrode coatings over time. Therefore please only use the core provided solutions). Please continue to wear disposable gloves when using the 70% ethanol provided.

5. After using any instrumentation, but before exiting, please fill out the 'User-Cleaned' log, located as a digital file on each instrument computer. This is to ensure that the bay is kept in good shape for each researcher.
6. Within the core, researchers are to maintain social distancing of at least 6'. Our hallways are narrow, so congregation/loitering is not allowed in these traffic areas. Additionally, our main locations are equipped with ceiling-dropped black out curtains, and so 1 researcher is allowed within said barriers, at a time. Moreover, directional signage indicating distance information shall be affixed to the floor for reference.
7. Researchers must email or call as the primary mode of contact with the IDDRRC-CIC staff. Zoom meetings are also available for longer consultations. Please see [Contacting the Staff](#) above for details.
8. Follow safe practices and encourage colleagues to also follow safe practices. Concerns or suggestions can be communicated to any of the CIC core staff. Incidents can be reported anonymously. Please see *Contacting Staff* for details.
9. If the CIC has agreed to image on your behalf, please coordinate with staff at least 2 days before hand on the logistics of drop off of materials/samples. This allows core staff time to inspect the delivery, and disinfect, if needed. (NB: at this time, this is a service for fixed tissues only. We will consider expanding to live tissue in the future). Also, please arrange a meeting with the core staff to discuss details of your project beforehand.
10. Researchers with health conditions who are at risk to develop severe symptoms should avoid the facility.
11. Coughs/sneezes should be covered with your bent elbow, or a tissue.
12. Food and/or drinks are very strictly prohibited.

**These safety guidelines are subject to change according to policies from the government (federal or local) and/or the institution.**

**Thank you for your understanding as we try to keep a safe working environment for all.**