OPENING OF Dynamic Imaging Science Center (DISC)

This document details procedures that shall be adhered to by researchers doing MR scans to ensure the safety of research subjects and Center personnel.

The measures outlined in this document are meant to mitigate the risk of infection at the HPLF MRI as much as possible. However, every interaction must be viewed as if it might be taking place with a silent spreader. This assumption governs all steps outlined below.

GENERAL PROCEDURES

- Masks must be worn at all times by everyone in the reception area, the MR operator room, the MR scanner room, and in preparation areas.
- The investigators and the technician must wear disposable gloves.
- Hand washing, before the start of a study and after it is finished (for MR studies), must take place in the bathroom of the suite (LL130C); there is no sink available in the control room.
- An interpersonal distance of 6 feet should be maintained at all times, whenever possible.
- Subjects will be asked to contact the PI of the study for which they are participating if they develop confirmed COVID-19 infection in the 7 days following the Center visit. The PI will then inform Dr. Krishna Nayak, Center Director, when the subject was scanned (day and time slot). The Center will follow USC policies on contact tracing.
- Researchers must have their PI-level plans approved by their school/department and all IRB requirements must be met. The IRB requires the submission of the approval letter of the PI-level plan and the completion of the attestation on the iStar website by all researchers that will interact with subjects. If an amendment is required, it must be approved by the IRB before the research group can resume scanning.
- As before, subjects must sign the Incidental Findings form before being scanned. This form now contains a section that informs participants that the Center equipment has been thoroughly cleaned, but that the Center cannot be held responsible for any COVID-19 infection they might develop after being scanned. Also, as before, subjects are free to refuse to sign the form; however, in that case they are not allowed to be scanned.

SCANNING

PRIOR TO THE DAY OF SCANNING

Investigators must contact subjects, either electronically or by telephone, to conduct a health survey using the USC questionnaire (following page) to confirm that they are healthy, have no cough or fever, and have not been in recent contact with anyone known to be sick, particularly with any respiratory disease.
If subjects answer yes to any of the questions on the health screen, they may not be scanned.

Subjects must also be informed that, for everyone’s protection, they should come unaccompanied if possible. Subjects who are minors will be allowed to be accompanied by one adult only. Any individual accompanying a subject must complete the health survey.

**UPON ARRIVAL AT THE CENTER**

1. One representative of the investigator’s team should welcome subjects at the ground floor of MCB. The representative must wear a mask and gloves.

2. **Subjects to be scanned must use MRI safe masks available in the control room; they shall not use their own masks which may, or may not, contain metal parts.** Investigators not entering the magnet room may use their own masks. Investigators entering the magnet room must use an MRI-safe mask without a metal nose bridge; if the investigator is not sure that their own mask is metal free, they should use those available in the MRI control room.

3. The health survey must be repeated in person and particular attention will be paid to any change in personal status or contacts since the date of the previous health survey (not for the past 14 days). **Subjects may not be scanned if they respond to any survey question in the affirmative or if they currently exhibit symptoms deemed to be signs of COVID-19 infection** (fever, cough, fatigue, loss of smell or taste, muscle pains) including coughing or sneezing. Subject’s temperature must be obtained and
recorded. A gun thermometer will be available at the Center. **Subjects with fever (as defined by temperature above 100º) may not be scanned.**

4. MR safety screening and signing of consent forms: the writing instrument used for signing will be wiped with disinfectant wipes, in the presence of the subject, before the subject uses them and after the subject has signed.

5. Any ferromagnetic objects worn by the subject or in their pockets will be removed by the subjects themselves and placed into a disposable plastic bag (provided by the Center) before they are locked in the existing lockers. Subjects may be helped by a gloved investigator if necessary.

6. The MR gantry and all cushions will be covered with discardable covers.

7. The subject will be informed that all scanner parts in contact with the subject have been cleaned prior to positioning on the MR gantry.

8. Whenever possible due to the design of the experiment, the subject should wear a MR compatible mask (available in the control room).

9. If so desired, the subject will be given disposable gloves (available in the control room).

10. No one may enter the MRI control room if they are not required for the execution of the experiment.

11. If necessary, a one-time use personal blanket will be provided for the subject’s use.

12. Any steps requiring proximity within 6 feet of the subject must not exceed a total of 10 minutes.

**AFTER COMPLETION OF THE STUDY**

1. The subject will be escorted by the investigator out of the Center and the building.

2. After the subject has left, the investigator will proceed with the cleaning/disinfecting of **ALL** equipment used during the session. There will be a required and automatically scheduled time slot of 30 minutes added for this procedure to take place at no extra expense to the investigator.

   **In the scanner room:** use 70% alcohol wipes for all items that come into contact or close proximity with research subjects, including:
   
   a. Head coil  
   b. Mirror  
   c. Button box  
   d. Main magnet bore  
   e. Squeeze ball  
   f. Earphones  
   g. Biopac cables (after discarding all Biopac one-use contacts)  
   h. MRI table movement buttons  
   i. Subject bed (after discarding all paper covers)  
   j. Any drawer handles inside the magnet room that were used  
   k. Scanner room door handles and airlock switch

   **In the control room:**
   
   a. Intercom buttons  
   b. Intercom speaker  
   c. Computer keyboards
d. Biopac computer (if used)
e. All switches and door or drawer handles touched

**RECEPTION ROOM**

To allow for a minimum of 6’ social distancing between individuals, the reception area may not be occupied by more than four individuals, including the subject and the investigator, for more than 10 minutes. All individuals must wear masks at all times. It is preferable that only the research subject occupies this room. Instructions may be delivered outside the room before the research subject enters on their own.

All instruments and props to be used must be disinfected prior to occupying the room. This includes disinfecting the tables and countertops **before** and **after** the preparation session.

**MRI OPERATOR ROOM**

Up to three investigators are allowed at any one time. All must be masked, and the primary investigator must be gloved. The interpersonal distance of 6 feet needs to be maintained. Closer contact must be limited to no more than 10 minutes.