Covid -19 BIRC Operational Changes for MRI, EEG and MEG

Last Updated: June 2020
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Section 1: What is Covid-19 and how to protect yourself.
What is Covid-19 and How does it spread? From UGA Return to Campus Guidelines

- COVID-19 is a mild (or no symptoms) to severe respiratory illness caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2).
- COVID-19 is primarily spread from person-to-person through respiratory droplets, generated when an infected person coughs, sneezes, talks, shouts or sings.
- You may also become infected by touching your mouth, nose, or eyes after sharing or handling any object or touching a public surface contaminated by the virus.
- Since SARS-CoV-2 spreads between people who are in close proximity to one another, it is important to avoid contact and physically distance (at least 6 feet) from others when possible, and all employees are strongly encouraged to wear a face covering while on campus.
- Since SARS-CoV-2 can be spread through contact with surfaces and objects, frequent handwashing, use of hand sanitizer, and cleaning and disinfection of public surfaces also are critical to prevention of disease spread.

How Germs Spread (from CDC website)

Washing hands can keep you healthy and prevent the spread of respiratory and diarrheal infections from one person to the next. Germs can spread from other people or surfaces when you:

- Touch your eyes, nose, and mouth with unwashed hands
- Prepare or eat food and drinks with unwashed hands
- Touch a contaminated surface or objects
- Blow your nose, cough, or sneeze into hands and then touch other people’s hands or common objects

Key Times to Wash Hands

You can help yourself and your loved ones stay healthy by washing your hands often, especially during these key times when you are likely to get and spread germs:

- **Before, during, and after** preparing food
- **Before** eating food
• Before and after caring for someone at home who is sick with vomiting or diarrhea
• Before and after treating a cut or wound
• After using the toilet
• After changing diapers or cleaning up a child who has used the toilet
• After blowing your nose, coughing, or sneezing
• After touching an animal, animal feed, or animal waste
• After handling pet food or pet treats
• After touching garbage
• After you have been in a public place and touched an item or surface that may be frequently touched by other people, such as door handles, tables, gas pumps, shopping carts, or electronic cashier registers/screens, etc.
• Before touching your eyes, nose, or mouth because that’s how germs enter our bodies.

Follow Five Steps to Wash Your Hands the Right Way

Washing your hands is easy, and it is one of the most effective ways to prevent the spread of germs. Clean hands can stop germs from spreading from one person to another and throughout an entire community—from your home and workplace to childcare facilities and hospitals.

Follow these five steps every time.

1. **Wet** your hands with clean, running water (warm or cold), turn off the tap, and apply soap.
2. **Lather** your hands by rubbing them together with the soap. Lather the backs of your hands, between your fingers, and under your nails.
3. **Scrub** your hands for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song from beginning to end twice.
4. **Rinse** your hands well under clean, running water.
5. **Dry** your hands using a clean towel or air dry them.

Use Hand Sanitizer When You Cannot Use Soap and Water

You can use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available.

Washing hands with soap and water is the best way to get rid of germs in most situations. If soap and water are not readily available, you can use an alcohol-based hand sanitizer that
contains at least 60% alcohol. You can tell if the sanitizer contains at least 60% alcohol by looking at the product label.

**Sanitizers can quickly reduce the number of germs on hands in many situations. However,**

- Sanitizers do **not** get rid of all types of germs.
- Hand sanitizers may not be as effective when hands are visibly dirty or greasy.
- Hand sanitizers might not remove harmful chemicals from hands like pesticides and heavy metals.

**How to use hand sanitizer**

- Apply the gel product to the palm of one hand (read the label to learn the correct amount).
- Rub your hands together.
- Rub the gel over all the surfaces of your hands and fingers until your hands are dry. This should take around 20 seconds.

**Social Distancing:** From UGA Return to Campus Guidelines

Since people can spread the virus before having symptoms, it is important to keep physical distance from others when possible. When possible, faculty and staff should use the following safety practices:

- Maintain six feet (about two arm's length) of distance from other people.
- Avoid gathering in groups in common areas in buildings.
- You are strongly encouraged to wear a face covering.
- Continue to limit large group meetings – utilize distance communication tools like Zoom.
- Utilize sign reminders to practice social distancing in shared areas (templates available).
Face Coverings and Masks: From UGA Return to Campus Guidelines

In the best interest of the health and safety of our community and based on instructions from the USG, all UGA employees are strongly encouraged to wear a cloth face covering on campus to minimize the potential for COVID-19 virus spread. This includes all public spaces and spaces used by multiple people, with an even greater expectation for those who traverse campus to work in multiple buildings on a routine basis.
Section 2: Covid-19 BIRC Operational Changes and General Guidelines
Returning to Research Phases and Requirements during Covid 19

The Bio-Imaging Research Center will follow the guidelines and requirements per the UGA Guide to Return to Campus and the Research Resumption Plans from the UGA Office of Research.

**Phase 1: Starting June 15, 2020**

Faculty, staff, and graduate students can return to UGA research facilities under terms defined in individual Research Resumption Plans that faculty will develop for their research groups using an Office of Research template. These approved plans must be provided to BIRC personnel prior to scheduling. These guidelines are in addition to the requirements of an approved IRB or IACUC, BIRC Scientific Review Committee Approval and Account number.

- Research Resumption Plans must address social distancing, restricted space occupancy, sanitizing surfaces and spaces, and any travel plans.

- Plans must follow USG and GDPH guidelines and must be approved by the appropriate supervisor (department head, center director, school chair, associate dean for research, or dean depending on the unit).

- Undergraduate researchers will only be allowed onsite with explicit permission from the unit head

**Phase 2: Starting July 20, 2020**

Same guidelines as Phase 1. An approved Research Resumption Plan must be provided to BIRC personnel. These guidelines are in addition to the requirements of an approved IRB or IACUC, BIRC Scientific Review Committee Approval and Account number.

**Phase 3: Starting August 10, 2020**

Each faculty member/principal investigator must have an RRP, approved by the immediate supervisor as per Phases 1 and 2, for all onsite research activities to be conducted in Phase 3. This plan must address how an increased number of team members can work together safely in the contiguous areas used for research and align with any health directives including social distancing that may be applicable at the time. If an approved Phase 1 or Phase 2 RRP meets all Phase 3 requirements for all intended research activities personnel, and onsite spaces, it need not be modified. Otherwise, faculty/principal investigators wishing to add personnel or made other adjustments in Phase 3 should revise their previously-approved RRP and submit it for approval as in Phases 1 and 2.
BIRC Guidance:
The Bio-Imaging Research Center is following the established CDC guidelines (CDC Infection Control Recommendations, 2019) that also have been recommended by the University of Georgia Respiratory Protection Program. Under their guidance we will establishing the following controls:

- To help minimize exposure
  - Engineering Controls
  - Administrative Controls
  - Work Practice Controls
- To help prevent exposure
  - Following OSHA Guidelines and UGA Respiratory Protection Program
  - Personal Protective Equipment

Guidelines to Minimize Exposure:

Engineering Controls

1. Physical Separation:

   The BIRC will be physically divided into three working sections. The MRI Section, the EEG/MEG Section, and Administrative Office Area. Screening Stations will be established outside the MRI and EEG/MEG Sections.

   A. **The MRI Section** will house the 7T MRI, the 3T MRI, MRI Simulator Room, Physics Lab, Vet School Prep Area, and BIRC Restroom.

   B. **The EEG/MEG Lab** will house the EEG, MEG, Eye Tracking Room and Phlebotomy Lab. Personnel within this section will utilize the Coverdell First Floor Bathrooms.

   C. **Administrative Area** will consist of the Helium and Oxygen Storage Area, Administrative Offices, and BIRC Meeting Area

   D. **Screening Stations** will be established for Covid-19 Symptom Questionnaires, Temperature Logs and Tracking Sheets.
2. **Personal Protective Equipment (PPE):**

   A. Reserve majority of PPE for staff and Research Assistants.

   B. Use Reusable Face shields-disinfected by MRI Technologist daily with Discide Ultra. Discide Ultra has been approved by the EPA as a Covid-19 Disinfectant. (EPA Website, 2020)

   C. Can wear PPE for more than one subject.
**Administrative Controls:**

1. If you are sick stay home policy. We do not want ill persons coming to work at BIRC. Temperature checks will be recorded upon your arrival at the BIRC.
2. If possible, alternate days or shifts that research areas are being utilized.
3. Train all workers on proper donning and doffing of PPE. See Appendix B.

**Work Practice Controls:**

1. Will emphasize frequent and thorough hand washing at any of the available sinks within the BIRC.
2. Hand Sanitizer w/60% alcohol or above will be placed in multiple locations within the BIRC for use.
3. We will provide Discide Ultra Spray and Wipes. Discide Ultra is approved by the EPA for disinfection for Covid-19. Please see Appendix C & D.
4. Reminders will be placed around BIRC: You must hand wash after doffing PPE.
5. Contact tracing to be kept on file for 30 days.

**Guidelines to Prevent Exposure:**

Following OSHA guidelines and UGA Respiratory Protection Program

Based on OSHA guidelines and confirmed with the UGA Respiratory Protection Program research studies within the BIRC are classified as an exposure level: *Medium*

**Personal Protective Equipment (PPE)**

The Following PPE will be provided by the BIRC for all Staff, Research Assistants, and participants.

1. Researcher or Researcher Assistant (RA)—mandated by “MEDIUM” Exposure Risk
   A. Facemask
   B. Hair Net
   C. Gloves
   D. Gown
E. Face Shield—do not dispose, will be disinfected, and reused

2. Participant
   A. Facemask—if they did not arrive with one
   B. Gloves, if requested
Section 3: MRI Screening Station and Operational Changes
General MRI Guidelines: What we need you to know ahead of time

1. PI researchers will be responsible for providing one employee/student to meet and greet subject and to assist the MRI Technologist. No more than 3 persons including the subject will be allowed in the MRI Section at any one time.

2. The MRI Technologist (currently Kim Mason) will operate the MRI for all scans. If after hours scanning is needed, this needs to be cleared ahead of time and scheduled.

3. The MRI Technologist will offer a flexed schedule based on needs.

4. At no time is movement between the MRI and EEG/MEG sections allowed during scanning. Consider these as two separate facilities.

5. Support staff must be trained by BIRC staff in proper donning, doffing, and disposal of PPE following the CDC website donning and doffing procedures found in Appendix B.

6. Donning PPE is required of all support staff entering the MRI or EEG/MEG work area.

7. Doffing PPE is required when existing the facility.

8. There is no exiting of the facility then re-entering without first doffing and donning PPE. The subject screening areas will be considered as within the facility.

9. Administrative area requires minimum PPE of facemask by researchers or visitors.

10. Screening areas will be established along with PPE stations.

11. If you need phlebotomy services, please schedule these ahead of time with our MRI Technologist (currently Kim Mason). For MRI Subjects, a special area within the MRI Section will be established in the 7T work area. For subjects undergoing EEG/MEG the EEG/MEG section Phlebotomy room will be used, but still needs to be scheduled ahead of time.

MRI Screening Station Procedures:

1. 24 Hour Pre-Requisites to be completed by Researchers:

All participants must be given a response number (convey to BIRC for identification purposes) and an electronic screening form completed within 24 hours of their visit. You can either email participant the link or submit for them, if completing over the phone. Responses to the screening form will be sent directly to the BIRC staff prior to participant’s appointment at BIRC. Investigators should include this time in subject remuneration.
The BIRC will not proceed with any study where a 24-hour questionnaire screening form has not been received. See Appendix A for printable questionnaire.

Here is link for electronic form. [https://forms.gle/BV5azpghzBgFGRep8](https://forms.gle/BV5azpghzBgFGRep8)

2. Day of scan
   a. Research Group RA arrives and answers questionnaire and takes and records their own temperature in log
   b. RA disinfects thermometer with provided alcohol pad
   c. RA disinfects hands with hand sanitizer
   d. RA dons PPE as indicated above—prior to subject arrival
   e. RA welcomes and greets participant
   f. RA gives participant facemask if participant is not wearing one.
   g. Research Participant is to use provided hand sanitizer.
   h. RA offers gloves to participant (not required).
   i. RA takes participant’s temperature and records in log.
   j. If temperature is under 100 degrees have participant complete questionnaire.
   k. RA disinfects thermometer with provided alcohol pad.
   l. If questionnaire responses are “NO” for questions 3, 5, 6 or 7 proceed into BIRC
   m. Fill out tracking sheet indicating all RA’s, staff that work or are exposed to participant.

MRI Section Procedure:

1. All scans will have a 1-hour buffer to allow BIRC Staff to properly disinfect work areas.
2. **Reminder:** At no time should PPE be worn outside the BIRC. So, if you need to go out you must doff your PPE and don new PPE prior to re-entering.
3. Once within the BIRC, physical distancing of 6 feet must be maintained as much as feasibly possible.
4. The completed MRI clearance sheet will be reviewed by the MRI Technologist. These forms should be completed over the phone by research group prior to subject’s appointment.
5. Participant will be asked to go to the restroom and put personal belongings placed in a locker.
6. RA will assist MRI Technologist where needed and be responsible for paradigm presentation.
7. Participant will be scanned according to your project.
6. Upon completion of scan, the RA and participant can leave and doff their PPE and place in wastebasket at the entrance to the MRI Section of the BIRC.
7. RA will place face shield in a separate container.
8. There will be hand sanitizer at doffing station. Sanitize hands prior to doffing PPE and after PPE is doffed.
9. There are three sinks available to wash hands—restroom, vet school prep area, and 7T work area.

10. Assessment Rooms or Lab rooms are the responsibility of the RA for Disinfecting

MRI Section Disinfection Procedures:
Disinfection of the 3T and 7T MRI equipment and work area will be the responsibility of the MRI Technologist. All disinfecting will take place with Discide Wipes or Discide Spray. See Appendix C for the Palmero Health Discide Ultra information Sheet. FDA approved to kill SARS-CoV-2 within 30 seconds of contact.

Scanner room:

- Magnet Table
- Coils
- Keypads or Response Boxes
- Goggles
- Cushions
- Doorknobs
- Draw handles
- Magnet Control Panels
- Any other equipment
- Countertops
• Floors

MRI Control Console:
• Scanner computer and keyboard
• Eprime computer and keyboard
• Desks
• Chairs
• Light Switches
• Handles

Work Area
• Doorknobs
• Table
• Chairs
• Computer
• Keyboard
• Mice
• Pens
• Light Switches
• Handles

Back MRI Control Room
• Power Strips
• Electrical Plugs
• Any equipment used during scan
• Doorknobs
Lockers and restroom

- Doorknobs
- Toilet Seat
- Faucet and Sink
- Paper Dispenser
- Soap Dispenser
Section 4: MEG and EEG Screening Station and Operational Changes
General EEG/MEG Guidelines: What we need you to know ahead of time

1. PI researchers will be responsible for providing one employee/student to meet and greet subject and to assist the EEG/MEG. No more than 3 persons including the participant will be allowed in the EEG/MEG Section at any one time.

2. The employee/student will operate the EEG/MEG for all research.

3. At no time is movement between the MRI and EEG/MEG sections allowed during scanning. Consider these as two separate facilities.

4. Support staff must be trained by BIRC staff in proper donning, doffing, and disposal of PPE following the CDC website donning and doffing procedures found in Appendix B.

5. Donning PPE is required of all support staff entering the EEG/MEG work area.

6. Doffing PPE is required when exiting the facility.

7. There is no exiting of the facility then re-entering without first doffing and donning PPE. The screening room is considered as within the BIRC.

8. Administrative area requires minimum PPE of facemask by researchers or visitors.

9. Screening areas will be established along with PPE stations.

10. If you need phlebotomy services, please schedule these ahead of time with our MRI Technologist (currently Kim Mason). This service may be suspended.

MEG/EEG/Eye Tracking Screening Station Procedures:

1. 24 Hour Pre-Requisites to be completed by Researchers:

All participants must be given a response number (convey to BIRC for identification purposes) and an electronic screening form completed within 24 hours of their visit. You can either email participant the link or submit for them, if completing over the phone. Responses to the screening form will be sent directly to the BIRC staff prior to participant’s appointment at BIRC. Investigators should include this time in subject remuneration.

The BIRC will not proceed with any study where a 24-hour questionnaire screening form has not been received. See Appendix A for printable questionnaire.

Here is link for electronic form. https://forms.gle/BV5azpghzBgFRRep8
2. Day of scan
   
a. Research Group employee/student arrives and answers questionnaire and takes and records their own temperature in log. Room 126A
b. RA disinfects thermometer with provided alcohol pad
c. RA dons PPE as indicated above—prior to subject arrival
d. RA welcomes and greets participant at BIRC waiting room. **Do not go into hallways with PPE donned.**
e. RA gives participant facemask if participant is not wearing one.
f. RA has participant disinfect hands with provided hand sanitizer.
g. RA offers gloves to participant (not required).
h. RA takes participant’s temperature and records in log.
i. If temperature in under 100 degrees have participant complete questionnaire.
j. RA disinfects thermometer with provided alcohol pad
k. If questionnaire responses are “NO” for questions 3, 5, 6 or 7 proceed into BIRC
l. Fill out tracking sheet indicating all employees/students/staff that work or are exposed to participant.
m. Disposable covers for chairs will be provided
n. Disposable measuring tapes for head circumference measurements will be provided.

**EEG/MEG/Eye Tracking Section Procedure:**

1. All studies will have a 1-hour buffer to allow BIRC Staff to properly disinfect work areas.
2. **Reminder:** At no time should PPE be worn outside the BIRC. So, if you need to go out you must doff your PPE and don new PPE prior to re-entering.
3. Once within the BIRC, physical distancing of 6 feet must be maintained as much as feasibly possible. However, during sensor fitting procedures and moving participants in and out of scanning equipment it will be required that personnel operate within the recommended 6 feet.
4. Participant will be asked to go to the restroom and put personal belongings in room 115.
5. Graduate Assistant or RA will be responsible for paradigm presentation and operation of equipment.
6. Upon completion of study, the participant can leave and doff their PPE and place in wastebasket at the entrance to the EEG/MEG suite of the BIRC.
7. RA will place face shield in a separate container but should remain in all other PPE until the disinfection procedures are completed.
8. There will be hand sanitizer at doffing station for participants and staff. Disinfect hands prior to removing PPE and after removal.
9. There is a sink available to wash hands in room 115 of the EEG/MEG suite.
10. **Assessment Rooms or Lab rooms are the responsibility of the Graduate Assistant or RA**

### EEG/MEG/Eye Tracking Section Disinfection Procedures:

Disinfection of the EEG/MEG/Eye Tracking data collection equipment and work area will be the responsibility of the Graduate Assistant or RA in charge of the scan. All surface disinfecting will take place with Discide Wipes or Discide Spray. See Appendix C for the Palmero Health Discide Ultra information Sheet. FDA approved to kill SARS-CoV-2 within 30 seconds of contact. EEG sensors, sensor nets, and eye tracking halo will follow procedures as recommended by the manufacturers (EGI by Philipps, Neuroscan, Eye-Link, etc.). These sensor/sensor net disinfection procedures will be posted in room 115 wet lab for reference.

### Scanning Equipment and rooms:
- EEG sensors and sensor nets
- MEG head Coils
- Eye tracking halo and chin rest
- Keypads or Response Boxes
- Headphones
- Cushions and items used to fix subject’s head
- Doorknobs
- Chair handles
- Chair Cover
- Any other equipment used during scan
• Countertops
• Floors

**EEG/MEG Control Consoles:**
• Scanner computer and keyboard
• Stimulus computer and keyboard
• Desks
• Chairs
• Light Switches
• Handles

**Work Area**
• Doorknobs
• Table
• Chairs
• Computer
• Keyboard
• Mice
• Pens
• Light Switches
• Handles

**Lockers and restroom**
• Doorknobs
• Toilet Seat
• Faucet and Sink
• Paper Dispenser
• Soap Dispenser
Section 5: Administrative Offices
**Administrative Area** will consist of the Helium and Oxygen Storage Area, Administrative Offices, and BIRC Meeting Area.

- Facemask are to be worn entering and exiting the area.
- During meetings facemask will be worn.
- Social distancing rule of 6 feet apart applies
- No one is to enter the administrative area from the BIRC MRI or MEG/EEG Labs without doffing their PPE.
- Hand sanitizer will be accessible in each office and in hallway.
- This area will utilize the restrooms on the first floor of the Coverdell Building.

Areas to be disinfected:
- Doorknobs
- Table
- Chairs
- Computer
- Keyboard
- Mice
- Pens
- Light Switches
- Handles
References:

CDC Handwashing 2020 (https://www.cdc.gov/handwashing/when-how-handwashing.html)


UGA Guide to Return to Campus (https://www.uga.edu/coronavirus/GuideToReturnToCampus.pdf)

Research Resumption Plans from the UGA Office of Research (https://research.uga.edu/covid/research-resumption/)
Appendix A: Covid-19 Questionnaire (CDC Website, 2020)

1. Response Number: Given to you by research group___________________

2. How old are you?
   - Under 18
   - 18 to 64
   - 64 or older

3. Have you experienced any of the following recently, even if extremely mild?
   - Fever or Chills
   - Mild or Moderate Difficulty Breathing
   - New or worsening cough
   - Sustained loss of smell, taste, or appetite
   - Sore Throat
   - Vomiting or Diarrhea
   - Aching throughout the body
   - None of the above

4. Do any of these apply to you?
   - Moderate to severe asthma or chronic lung disease?
   - Cancer treatment or medicine that cause immune suppression?
   - Inherited Immune Deficiency or HIV?
   - Serious heart conditions, such as heart failure or prior heart attack?
   - Diabetes with complications?
   - Kidney failure that needs dialysis.
   - Cirrhosis of the liver?
   - Extreme Obesity?
   - Pregnancy
   - None of the above

5. In the last 14 days have you traveled internationally?
   - Yes
   - No

6. In the last 14 days have you traveled anywhere that has Covid-19 widespread?
   - I live in an area that is widespread
   - I have visited an area that the virus is widespread
   - None of the above
   - I do not know
7. **In the last 14 days have you been around someone who is known to have Covid-19?**
   - I live with someone who has Covid-19
   - I have had close contact with someone with Covid-19
   - I have been near someone with Covid-19, but not in close contact
   - I have had no exposure
   - I do not know

8. **Do you live in a long-term care facility?**
   - Yes
   - No

9. **Do you work within a medical facility? This includes hospital, emergency room, other medical facility, long term care facility. Select all that apply**
   - I have worked in a healthcare facility within the last 14 days. This includes volunteering
   - I plan to work in a healthcare facility within the next 14 days.
   - I do not work or volunteer in a healthcare facility.
Appendix B: Donning and Doffing Personal Protective Equipment (PPE) (CDC Website, 2020)

**SEQUENCE FOR PUTTING ON PERSONAL PROTECTIVE EQUIPMENT (PPE)**

The type of PPE used will vary based on the level of precautions required, such as standard and contact, droplet or airborne infection isolation precautions. The procedure for putting on and removing PPE should be tailored to the specific type of PPE.

1. **GOWN**
   - Fully cover torso from neck to knees, arms to end of wrists, and wrap around the back
   - Fasten in back of neck and waist

2. **MASK OR RESPIRATOR**
   - Secure ties or elastic bands at middle of head and neck
   - Fit flexible band to nose bridge
   - Fit snug to face and below chin
   - Fit-check respirator

3. **GOGGLES OR FACE SHIELD**
   - Place over face and eyes and adjust to fit

4. **GLOVES**
   - Extend to cover wrist of isolation gown

**USE SAFE WORK PRACTICES TO PROTECT YOURSELF AND LIMIT THE SPREAD OF CONTAMINATION**

- Keep hands away from face
- Limit surfaces touched
- Change gloves when torn or heavily contaminated
- Perform hand hygiene
HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE)
EXAMPLE 1

There are a variety of ways to safely remove PPE without contaminating your clothing, skin, or mucus membranes with potentially infectious materials. Here is one example. **Remove all PPE before exiting the patient room** except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GLOVES
   - Outside of gloves are contaminated!
   - If your hands get contaminated during glove removal, immediately wash your hands or use an alcohol-based hand sanitizer.
   - Using a gloved hand, grasp the palm area of the other gloved hand and peel off first glove.
   - Hold removed glove in gloved hand.
   - Slide fingers of ungloved hand under remaining glove at wrist and peel off second glove over first glove.
   - Discard gloves in a waste container.

2. GOGGLES OR FACE SHIELD
   - Outside of goggles or face shield are contaminated!
   - If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer.
   - Remove goggles or face shield from the back by lifting head band or ear pieces.
   - If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container.

3. GOWN
   - Gown front and sleeves are contaminated!
   - If your hands get contaminated during gown removal, immediately wash your hands or use an alcohol-based hand sanitizer.
   - Unfasten gown ties, taking care that sleeves don’t contact your body when reaching for ties.
   - Pull gown away from neck and shoulders, touching inside of gown only.
   - Turn gown inside out.
   - Fold or roll into a bundle and discard in a waste container.

4. MASK OR RESPIRATOR
   - Front of mask/respirator is contaminated — DO NOT TOUCH!
   - If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer.
   - Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front.
   - Discard in a waste container.

5. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE

PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE.
HOW TO SAFELY REMOVE PERSONAL PROTECTIVE EQUIPMENT (PPE)
EXAMPLE 2

Here is another way to safely remove PPE without contaminating your clothing, skin, or mucous membranes with potentially infectious materials. Remove all PPE before exiting the patient room except a respirator, if worn. Remove the respirator after leaving the patient room and closing the door. Remove PPE in the following sequence:

1. GOWN AND GLOVES
   - Gown front and sleeves and the outside of gloves are contaminated!
   - If your hands get contaminated during gown or glove removal, immediately wash your hands or use an alcohol-based hand sanitizer
   - Grasp the gown in the front and pull away from your body so that the ties break, touching outside of gown only with gloved hands
   - While removing the gown, fold or roll the gown inside-out into a bundle
   - As you are removing the gown, peel off your gloves at the same time, only touching the inside of the gloves and gown with your bare hands. Place the gown and gloves into a waste container

2. GOGGLES OR FACE SHIELD
   - Outside of goggles or face shield are contaminated!
   - If your hands get contaminated during goggle or face shield removal, immediately wash your hands or use an alcohol-based hand sanitizer
   - Remove goggles or face shield from the back by lifting head band and without touching the front of the goggles or face shield
   - If the item is reusable, place in designated receptacle for reprocessing. Otherwise, discard in a waste container

3. MASK OR RESPIRATOR
   - Front of mask/respirator is contaminated — DO NOT TOUCH!
   - If your hands get contaminated during mask/respirator removal, immediately wash your hands or use an alcohol-based hand sanitizer
   - Grasp bottom ties or elastics of the mask/respirator, then the ones at the top, and remove without touching the front
   - Discard in a waste container

4. WASH HANDS OR USE AN ALCOHOL-BASED HAND SANITIZER IMMEDIATELY AFTER REMOVING ALL PPE
   - OR

PERFORM HAND HYGIENE BETWEEN STEPS IF HANDS BECOME CONTAMINATED AND IMMEDIATELY AFTER REMOVING ALL PPE
Appendix C: DisCide Ultra Disinfectant EPA Approved for SARS 2 (Palmero Website, 2020)

Kills Covid-19 within 30 seconds of contact
Bio-Imaging Exposure Tracking Sheet

Date: ____________________________________________________________________

Time: ____________________________________________________________________

Subject Main PI:____________________________________________________________

Subject Number:____________________________________________________________

Resource Area:
    o MEG
    o EEG
    o MRI
    o Eye tracking

Staff/RA’s: MUST LIST ALL NAMES

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
Appendix E: EPA Approval for Covid-19

List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2

<table>
<thead>
<tr>
<th>EPA Registration Number</th>
<th>Active Ingredient(s)</th>
<th>Product Name</th>
<th>Company</th>
<th>Follow the disinfection directions and preparation for the following virus</th>
<th>Contact Time (in minutes)</th>
<th>Formulation Type</th>
<th>Surface Type</th>
<th>Use Site</th>
<th>Emerging Viral Pathogen Claim?</th>
<th>Date Added to List N</th>
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</thead>
<tbody>
<tr>
<td>10492-4</td>
<td>Quaternary ammonium; Isopropanol</td>
<td>Discide Ultra Disinfecting Towelettes</td>
<td>Palmero Healthcare LLC</td>
<td>Human coronavirus</td>
<td>0.5 (30 seconds)</td>
<td>Wipe</td>
<td>Hard Nonporous (HN)</td>
<td>Healthcare; Institutional; Residential</td>
<td>No</td>
<td>03/13/2020</td>
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<td>10492-5</td>
<td>Quaternary ammonium; Isopropanol</td>
<td>Discide Ultra Disinfecting Spray</td>
<td>Palmero Healthcare LLC</td>
<td>Human coronavirus</td>
<td>0.5 (30 seconds)</td>
<td>RTU</td>
<td>Hard Nonporous (HN)</td>
<td>Healthcare; Institutional; Residential</td>
<td>No</td>
<td>03/13/2020</td>
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