**Official Title:** RECOVER-NEURO: A Platform Protocol for Evaluation of Interventions for Cognitive Dysfunction in Post-Acute Sequelae of SARS-CoV-2 Infection (PASC)

**NCT:** NCT05965752

**IRB Document Date:** February 23, 2024

**INFORMED CONSENT FORM**
**AND**
**AUTHORIZATION TO USE AND DISCLOSE PROTECTED HEALTH INFORMATION**

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|---|---|
| **Sponsor / Study Title:** | **Duke Clinical Research Institute (DCRI) / "RECOVER-NEURO: A Platform Protocol for Evaluation of Interventions for Cognitive Dysfunction in Post-Acute Sequelae of SARS-CoV-2 Infection (PASC)"** |
| **Protocol Number:** | **Pro00112477 / RECOVER-NEURO** |
| **Principal Investigator: (Study Doctor)** | **«PiFullName»** |
| **Telephone:** | **«IcfPhoneNumber»** |
| **Address:** | **«PiLocations»** |

***Brief Summary***

*This is a research study to find out if certain interventions, or possible treatments, can improve problems with thinking and memory that last more than 3 months after a COVID-19 infection. This condition is known as Post-Acute Sequelae of SARS-CoV-2 Infection (PASC), or Long COVID.*

*In this study, we want to learn if the study interventions can help you get better and recover from the cognitive symptoms associated with Long COVID. These symptoms may include brain fog, memory changes, feeling tired, headaches, slowed attention, difficulty solving problems, anxiety, and depression.*

*During the study, we will ask you questions about your symptoms and how they affect your daily life. We will also ask you to take memory and thinking ability tests. The study intervention period will last about 10 weeks with a clinic visit 3 months later. This study has 4 active intervention groups and 1 active comparator group for a total of 5 study groups. Participants will only be assigned to 1 of the 5 groups. The active comparator group will include an activity that is similar to the active intervention and will be used to learn how the active intervention affects cognitive function*.

*If you are taking part in other RECOVER clinical trials or the RECOVER cohort studies, your study data may be combined across the RECOVER studies and analyzed together. Combined study data may include personal information like your birthdate and dates of your study activities or health events.*

*Taking part in this study comes with some possible risks including side effects from the study intervention(s) and loss of privacy. However, every effort will be made to reduce these risks. More information about possible risks are included later in this informed consent form.*

*You do not have to participate in this research to be treated for your condition. You can keep getting your usual healthcare.*

## STUDY CONSENT

The Researching COVID to Enhance Recovery (RECOVER) Initiative was created to research possible treatments for Long COVID. This study is a part of that effort and is called "RECOVER-NEURO: A Platform Protocol for Evaluation of Interventions for Cognitive Dysfunction in Post-Acute Sequelae of SARS-CoV-2 Infection (PASC)."

"Sequelae" means conditions or symptoms that are caused by a past disease, like COVID-19. A "protocol" is a detailed plan that researchers follow to do their research and collect information. Platform protocols are designed so other possible treatments can be added without the need to develop separate clinical trials. Studies using the RECOVER platform protocol design have similar goals and activities to understand how and why COVID-19 affects people differently, but they are studying different possible treatments for Long COVID. Using a platform study design and collecting some of the same information across RECOVER clinical trials will help us get answers for more people faster.

You are being asked to participate in RECOVER-NEURO. This study will include up to 315 participants from all over the United States. Your participation is voluntary—you do not have to join if you do not want to. Please read the study details in this informed consent form to help you decide if you want to take part in the study or not.

## INTRODUCTION

**Why am I being asked to take part in this study?**

You are being asked to take part in this study because you are at least 18 years old, you had a COVID infection, and you still have cognitive dysfunction symptoms that have lasted for at least 12 weeks. Common cognitive symptoms of Long COVID include trouble thinking clearly or remembering things (brain fog) and problems focusing on tasks. Other symptoms include feeling tired, headaches, anxiety, depression, and trouble problem solving, paying attention, or learning new things.

**Why is this study being done?**

More and more people are experiencing Long COVID in both hospitals and communities. Long COVID symptoms can seriously affect people's lives and their ability to think clearly. In this

study, researchers want to learn if certain interventions, or possible treatments, can improve cognitive symptoms. If successful, this study may improve symptoms for people with Long COVID and help researchers better understand the condition and how to treat it.

**How is this research being paid for?**
This study is paid for by a grant from the National Institutes of Health (NIH). Your study site is using funds from this grant to pay your study doctor and their staff to run the study. The NIH grant is also being used to cover the cost of study supplies for participants, including laptops, tablets, the BrainHQ program, and transcranial Direct Current Stimulation (tDCS) devices.

## VOLUNTARY PARTICIPATION & POTENTIAL BENEFITS

**What if I don't want to participate?**
You do not have to be in this study if you do not want to. If you decide to participate, you can choose to stop at any time. If you choose not to participate, your usual healthcare will not change. If you choose not to participate or if you stop after you join, you will not be punished or lose any benefits you already have.

**Will there be any benefit to me or others?**
We do not know if you will benefit from being in this study. The study intervention(s) may have a role in treating cognitive symptoms of Long COVID. You may want to participate to help doctors learn how to best care for adults with Long COVID. The information learned from this study may benefit others like you in the future.

**Will I be told about any new findings that may change my decision to participate?**
Yes. We will let you know if any new or important information is discovered during the study that may affect your decision to continue being in the study.

## WHAT TO EXPECT IF YOU DECIDE TO JOIN THIS STUDY

**How long will I be in this study?**
Your total time in the study will be about 5 to 6 months (160 days). The study intervention period will last 10 weeks (70 days), and you will have a follow-up visit 3 months (90 days) after the end of the study intervention period.

**What is involved in this study?**
You will need to visit your study doctor's office 3 to 4 times and complete the study intervention(s) for 10 weeks. All study interventions will be done online, so you can complete them from a quiet, private place. Participants will be provided with supplies to complete the study interventions. See the "How to Participate in the Study" section for details.

To begin the study, you will be assigned by chance to either an active intervention group or an active comparator group. This study has 4 active intervention groups and 1 active comparator group for a total of 5 study groups. You will only be assigned to 1 of these groups:

| **Group** | **Type** | **Interventions Included** |
|---|---|---|
| **BrainHQ** | Active study intervention | 50 BrainHQ sessions only |
| **BrainHQ active comparator** | Active comparator | 50 BrainHQ active comparator sessions only |
| **BrainHQ + PASC-CoRE** | Active study intervention | 50 BrainHQ sessions plus 12 PASC-CoRE sessions (9 group, 3 individual) |
| **BrainHQ + tDCS-active** | Active study intervention | 50 BrainHQ sessions while using transcranial direct current stimulation (active) |
| **BrainHQ + tDCS-comparator** | Active study intervention | 50 BrainHQ sessions while using transcranial direct current stimulation (comparator) |

- 'Active study intervention' means all or part of the study intervention could affect a participant's brain activity.
- 'Active comparator' means the study intervention is not expected to affect brain activity.
- Please note that BrainHQ + tDCS-comparator is considered an active study intervention because the BrainHQ part of the intervention is active, which could affect a participant's brain activity, while the tDCS part of the intervention is a comparator, which is not expected to affect a participants' brain activity.

You will have an equal chance of being in any of these 5 groups. You will have an 80% chance of being in an active study intervention group and a 20% chance of being in the active comparator group.

**About the BrainHQ Study Interventions**

Participants will complete activities through the BrainHQ website or app, created by Posit Science Corporation.

- **BrainHQ:** BrainHQ activities may include puzzles and games for brain training. In the active study intervention, the activities will adapt to each participant and will get a little easier or harder depending on the participant's progress.
- **BrainHQ active comparator:** In the BrainHQ active comparator group, the activities will be similar to the BrainHQ activities but will not adapt to the participant's progress.

**Schedule for BrainHQ Sessions (all groups)**

- Participants in all study groups will have one, 30-minute session per day (Monday through Friday) over 10 weeks, for a total of 50 sessions. The first session will include time for learning about study equipment, so it will be longer in duration (40-60 minutes).
    - **tDCS-active or tDCS-comparator groups:** Participants must complete their BrainHQ plus tDCS sessions Monday through Friday between 7 a.m. and 8 p.m. Eastern Standard Time (EST) when study staff are available to start and monitor the sessions.
    - **BrainHQ, BrainHQ active comparator, and BrainHQ + PASC-CoRE:** Participants can complete the BrainHQ sessions during the week (Monday through Friday) at a time that works best for them. However, participants are encouraged to complete the BrainHQ sessions Monday through Friday between 7 a.m. and 8 p.m. Eastern Standard Time (EST) when study staff are available to help with study equipment and the BrainHQ program, if there are any problems. Participants will receive a 1-2 minute reminder phone call or email each day Monday through Friday. The first 3 sessions must be completed Monday through Friday between 7 a.m. and 8 p.m. EST so that a study staff member can monitor the sessions to make sure participants don't have any problems accessing and using BrainHQ.

**Additional Study Interventions**

In addition to the BrainHQ active study intervention, participants in the PASC-CoRE, tDCS-active, or tDCS-comparator groups will have additional study interventions, described below.

- **BrainHQ plus PASC Cognitive Recovery (PASC-CoRE)**: In addition to 50 BrainHQ sessions, participants in this group will attend nine 1.5-hour PASC-CoRE group sessions and three 30-minute individual sessions with trained study staff.
    - The PASC-CoRE sessions will be scheduled when participants are able to meet in small groups or one-on-one with study staff. PASC-CoRE sessions will be held online and may be scheduled on evenings or weekends for flexibility with participants' schedules.

- **BrainHQ plus transcranial Direct Current Stimulation (tDCS)-active or BrainHQ plus tDCS-comparator**: During each of the 50 BrainHQ sessions, participants in the tDCS groups will use a device, made by Soterix Medical, to receive either the tDCS-active or the tDCS-comparator intervention while they complete the brain training activities.

  **tDCS** is a safe and well-tolerated form of noninvasive brain stimulation that sends a mild electrical current to specific parts of the brain to increase activity. tDCS is delivered through a handheld device that is attached to a headset. Before each session, participants will connect two electrodes to the tDCS headset and place the headset with electrodes on their head.

  - **tDCS-active**: the tDCS headset will deliver a mild electrical current (2.0 milliamps) to specific parts of the brain for about 30 minutes while participants complete the BrainHQ session. Participants will not be able to notice this minimal level of electrical current.
  - **tDCS-comparator**: the tDCS headset will briefly deliver a mild electrical current at the beginning of the BrainHQ session to mimic the active tDCS, but no additional current will be delivered from the device during the session. Participants will not be able to tell whether electrical current is being delivered, and the tDCS-comparator is not expected to affect brain activity.

  **Video Calls for tDCS Session Monitoring:** Through video calls on the study laptop or tablet, trained study staff will help participants make sure the tDCS electrodes and headset are placed correctly. After the headset is in place, the study staff member will give the participant a code to start the active or comparator tDCS and the participant will begin the BrainHQ session. The study staff member will remotely monitor the tDCS sessions through video calls for the first 1-2 minutes of each session. The first three sessions will be monitored for the entire 30 minutes.

## HOW TO PARTICIPATE IN THE STUDY

**What will I need to do?**

- Complete one, 30-minute BrainHQ active or comparator session per day (Monday through Friday) over 10 weeks, for a total of 50 sessions.

- Complete additional study interventions if assigned to the PASC-CoRE, tDCS-active, or tDCS-comparator group.

- Visit your study doctor's office 3 to 4 times:
  - screening and baseline visits
  - at the end of the 10-week study intervention period
  - 3 months after you finish the study intervention(s)

- Receive brief phone or video calls from study staff every week day (Monday through Friday) during the 10-week study intervention period. The calls may be related to the intervention or completion of surveys about your health.

- You can take 1 break from the study sessions for up to 3 days during the 10-week study intervention period, in case of emergency.

- During the 10-week study intervention period, you should not start, restart, or increase any cognitive training (activities to improve brain function) or supplements or non-prescription medications to improve brain function.

After the study, researchers will compare information from the different study groups to learn if the study intervention(s) affected participants' health.

**Will I be provided with supplies to complete the study interventions?**
Yes. New York University Langone (NYU) will mail a kit to you that will include a:

- laptop or tablet for you to access the BrainHQ sessions, have video calls with study staff, and talk with PASC-CoRE trainers if assigned to the PASC-CoRE group
- WiFi hotspot, if you do not have access to a stable internet connection
- tDCS device and headset, if you are assigned to a tDCS group

These items will be provided to you at no cost to use during the study. After the study, you must return these items using a pre-paid shipping box that will be provided by the study team.

**Will I know which group I am randomly assigned to?**
No. You, your study doctor, and the study staff will not know whether you are assigned to the active comparator group or the active intervention group receiving BrainHQ sessions. Similarly, you, your study doctor, and the study staff will not know if you are receiving tDCS-active or tDCS-comparator with the BrainHQ sessions, but they can quickly find out if needed for your safety or well-being.

**Can I participate in this study if I am already enrolled in other studies?**
It depends. As long as the other studies do not interfere with your eligibility for this study, you can probably participate. For example, if you are in another study that is treating cognitive symptoms, you may not be eligible for this study. You should notify your study doctor if you are participating in any other studies.

## SCREENING AND BASELINE (VISIT 1)

To make sure this study is a good fit for you, the study team will ask you several questions about your cognitive symptoms associated with Long COVID, your general health and well-being, and any new or worsening health problems you may have. You may be able to answer these questions without coming into the study clinic.

If this study appears to be a good match for you after screening and you choose to participate, you will be asked to visit your study doctor's office. This visit may happen over more than 1 day. The purpose of this visit is to tell you about what to expect during the study, confirm your interest in participating, and have you complete paperwork and surveys.

During this visit, we will ask you to:

- Give a blood sample.
- Give a nasal swab sample to test for COVID-19.
- Have your blood pressure, heart rate, height, and weight taken.
- Complete tests to measure your memory or thinking abilities.
- Complete a safety assessment.
- Take a pregnancy test, if you could become pregnant.

## Personal Information

If you decide to participate in the study, we will ask for your:

- Date of birth so we can confirm your age.
- Social Security number so we can pay you for your time and complete the tax form.
- Home address so we can send your payment to you and so NYU can mail you supplies for the study.
- Phone number and email address so we can send you surveys and contact you to ask if you have any questions or problems during the study.
- Contact information for a person you trust, like a family member or friend, so we can contact them if we cannot reach you. Your trusted contact may give us some information about your health if you are not able to.

Additionally, we will ask for some information about your health, including:

- Details about your COVID infection(s) and COVID vaccinations.
- Your health history (medical conditions), general health, and well-being.
- Your allergies, a list of medicines you are taking (prescription and non-prescription), and other therapies or treatments you are receiving.

## Blood Sample Collection

We will take blood for the RECOVER Research Biorepository 3 times during the study (baseline visit, end of intervention visit, and day 160 visit). We will take about 5 tablespoons (80 ml) of blood from your arm at each of these 3 visits. These samples may be used for future research. See the "Biorepository: Research Use of Data and Biospecimens" section for more information.

### Stool (Poop) Sample Collection

You will be given a stool (poop) sample collection kit to take home. We will ask you to collect the stool sample during your next bowel movement and place it in the kit. We will give you instructions on how to collect the sample and mail it directly to the biorepository using a pre-paid shipping box.

### Cognitive Tests (Memory and Thinking Ability Tests)

During the visits to your study doctor's office, we will ask you to do cognitive tasks that test your memory and thinking abilities. You may not use benzodiazepines (such as Valium or Xanax) or narcotics (such as morphine or codeine) for 2 days before the cognitive tests. If you take these medications in the 2 days before your visit, please call your study doctor's office to reschedule.

### Washout

During the screening period, your study doctor may ask you to temporarily stop taking certain medications if they might affect the results of the study and if it is safe for you to do so. This is called a washout period. The purpose of a washout period is to clear any effects from past medications from your body before you begin any study interventions. Your study doctor will discuss a potential 30-day washout period of any medication(s) with you.

If a 30-day washout period is needed:

- You may experience an increase or worsening of symptoms for the medical condition that you are taking the medication(s) for.
- The study team will recommend that you do not start taking these medications again until you finish the study (after Follow Up: End of Study – Visit 4). If you must start taking the medications again during the study, please tell your study team.

We encourage you to discuss the washout period with your primary care doctor. If your doctor determines that you should not stop taking certain medication(s), then you will not be able to participate in the study.

## FOLLOW UP: MIDDLE OF INTERVENTION (VISIT 2 - VIRTUAL)

You will be asked to complete a few tests online during a virtual study visit between days 32 and 38 (or weeks 5 and 6) of the study intervention period. This visit will be similar to the first visit, but it will be shorter and completed through a call with study staff. During this virtual visit, we will ask you to:

- Complete tasks that test your memory and thinking abilities.
- Report any new or worsening symptoms.
- Answer survey questions about your general health and well-being, including any changes to your medicines or other therapies.

- Complete a safety assessment.

## FOLLOW UP: END OF INTERVENTION (VISIT 3)

You will be asked to come to the study doctor's office at the end of the 10-week intervention period. During this visit, we will ask you to:

- Give a blood sample.
- Have your blood pressure, heart rate, and weight taken.
- Complete tasks that test your memory and thinking abilities.
- Report any new or worsening symptoms.
- Answer survey questions about your health and well-being, including any changes to your medicines or other therapies.
- Complete a safety assessment.
- Receive an at-home stool (poop) sample kit and instructions.

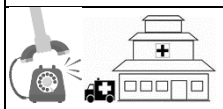
Your study doctor will remind you to return the laptop or tablet, WiFi hotspot (if applicable) and the tDCS device and headset (if applicable). Instructions to return the study equipment using will be included in the kit you receive at the beginning of the study.

## FOLLOW UP: END OF STUDY (VISIT 4)

You will be asked to come to the study doctor's office 3 months (90 days) after the end of the 10-week intervention period. During this visit, we will ask you to:

- Give a blood sample.
- Have your blood pressure, heart rate and weight taken.
- Complete tasks that test your memory and thinking abilities.
- Report any new or worsening symptoms.
- Answer survey questions about your health and well-being, including any changes to your medicines or other therapies.

## STUDY SCHEDULE

| **Screening** | **Baseline (Visit 1)** | **Study Intervention (10 weeks – Monday through Friday)** | **Middle of Intervention (Visit 2 – VIRTUAL, between week 5 and week 6)** | **End of Intervention (Visit 3 – Week 10)** | **End of Study (Visit 4 – 3 Months after Completing Study Intervention)** |
|---|---|---|---|---|---|
|  |  |  |  |  |  |
| • Informed consent<br>• Surveys | • Surveys<br>• Blood sample<br>• At-home stool (poop) sample*<br>• Nasal swab<br>• Memory and thinking ability tests<br>• Pregnancy test (if applicable)<br>• Randomization (study group assignment)<br>• Safety Assessment | • Complete study intervention activities<br>• Safety Assessment<br>• Brief phone or video calls with study staff each week day | • Surveys<br>• Memory and thinking ability tests<br>• Safety Assessment | • Surveys<br>• Blood sample<br>• At-home stool (poop) sample*<br>• Memory and thinking ability tests<br>• Safety assessment<br>• Return tDCS device and headset (if applicable), laptop or tablet, and WiFi hotspot (if applicable) | • Surveys<br>• Blood sample<br>• Memory and thinking ability tests |

*Please see the Stool (Poop) Collection section under Visit 1 for more information.

**What if I decide to stop participating before the study is over?**

You can stop participating in this study at any time. If possible, we would like you to stay in the study until it is over because your information and experiences are valuable to this research. Even if you stop the study intervention early, your health information is still very important to the study. We will ask that you continue to do the online surveys and complete the study visits.

If you are thinking about stopping, please let your study doctor know as soon as possible. Your study doctor can talk to you about options that might work for you to stay in the study. We will tell you if we learn anything new that might affect your decision to continue participating in the study. If we lose contact with you, we may keep collecting information from your medical record to see how you are doing until the study is done.

Your study doctor or the study sponsor may stop your participation in the study at any time without your consent.

## HOW WILL YOU PROTECT MY PRIVACY?

In any research, there is a risk that your personal information may not stay private. We will make every effort to keep your personal and health information safe, but we cannot guarantee complete confidentiality.

To protect your privacy, this study is covered by a Certificate of Confidentiality from the National Institutes of Health (NIH) and the U.S. Department of Health and Human Services. This means that the study staff cannot share any information that could identify you with anyone who is not a part of the research. However, there are a few situations where study staff might need to share information, like when it is required by law to report child or elder abuse, certain diseases, and threats to harm yourself or others. Your information will not be used as evidence in court unless you give your permission.
Your protected information may still be shared or used when the information:

1. Is shared with people connected with the research. For example, the information may be used within the NIH to check on the progress of the study.
2. Is required to be shared by federal, state, or local laws. For example, when information must be shared to meet the legal requirements of the federal U.S. Food and Drug Administration (FDA).
3. Is necessary for your medical treatment and you have given your permission to share the information.
4. Is used for other research that is allowed by federal regulations.
5. Is shared with your permission. For example, if an insurance or healthcare provider gets your written consent for us to share the research information.

By signing and dating this consent form, you are agreeing to your information being used as described above.

The Certificate of Confidentiality does not stop you or a loved one from sharing information about yourself or your participation in this research. If you want your research information to be shared with an insurer, medical care provider, or any other person not connected to the research, you must give your permission. This means that you and your loved ones must also actively protect your own privacy.

Finally, you should understand that the study doctor can take action to prevent serious harm to yourself or others, including informing the authorities.

### Receiving Information from Your Medical Record

While you are in the study, we may look at your medical record. Your medical record may include information about visits to your study doctor's, the hospital, or emergency room during the study. We may also collect information about medicines, lab results from blood or urine tests, and other information that may be useful to the study. All of this helps us understand your health while you are in the study.

## ALTERNATIVES

### What other choices are there?

Your other choice is not to participate. You can continue to get your usual healthcare whether or not you participate in the study.

Currently, no FDA-approved medicines or interventions are available to treat Long COVID. However, other options may be available to you if you choose not to participate in this study. Talk to the study doctor or your primary care doctor about other options. The study doctor will discuss with you the major risks and benefits of usual care and alternative treatment options.

## RESULTS AND STUDY PROGRESS

### Will I be told the results of the research?

We will summarize what we have learned when the final study results become available. We will share the summary of results on the study website: trials.recovercovid.org/neuro. Research summaries or articles published about the study will not include any information that could identify you.

Before the final study results, we may contact you with notes, newsletters, or other updates related to the study.

A description of this clinical trial is available on www.ClinicalTrials.gov, as required by U.S. law. This website will not include information that can identify you. At most, the website will include a summary of the results. You can search this website at any time.

## POSSIBLE RISKS AND DISCOMFORTS

A team of health experts called the Data and Safety Monitoring Board, chosen by the National Institutes of Health, will regularly check on the safety of study participants and how well the study is going.

**What risks can I expect from taking part in this study?**
Below are possible risks associated with the study intervention(s), blood draws, and nasal swabs. Loss of privacy is also a risk. Every effort will be made to protect your information, as described throughout this consent form. There may also be risks from participation that we do not know about yet.

### Risks Associated with the Study Intervention(s)

Any intervention may have associated risks. If you experience new or worse symptoms during or after the study, be sure to tell the study staff. Below are some possible, known study intervention risks. The BrainHQ and PASC-CoRE interventions have no obvious risks and are considered low-risk interventions.

**The most common possible side effects associated with BrainHQ are minor and include:**

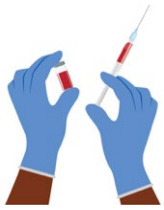
- Sore wrist
- Headache

**The most common side effects associated with transcranial Direct Current Stimulation (tDCS) include:**

- Mild skin irritation, warmth, itching, or tingling where the electrodes are placed on the scalp

Side effects from tDCS are infrequent, mild, and typically go away when the electrical current stops. More than 1,200 research studies on tDCS involving thousands of participants have been published. No serious or long-lasting effects have been reported.

### Risks Associated with Blood Draws



Getting your blood drawn might cause bleeding at the puncture site, bruising, and pain. Bleeding and bruising occur in a very small number of people who have their blood drawn. Most people only feel a short period of pain when the needle is inserted. Some people may become dizzy, lightheaded, or feel faint. On rare occasions, infection of the area where the blood was drawn may occur.

### Risks Associated with Nasal Swabs

Nasal swabs might cause some discomfort, mild irritation, mild pain in your nose, and minor bleeding from your nose.

### Risks Associated with Cognitive Tests (Memory and Thinking Ability Tests)

Cognitive tests might make you feel frustrated, tired, or give you headaches. Sometimes, these study interventions can make cognitive symptoms worse and increase post-exertional malaise (PEM), the worsening of symptoms following even minor physical or mental activity.

### Risks for People Who Could Become Pregnant

Birth control or contraception is not required to participate in the study. The effects of tDCS on pregnant participants are still being studied, and we have limited data on its use during pregnancy. However, there is no known or hypothetical risk associated with tDCS in pregnancy. Please tell the study team if you become pregnant during the study.

### Risks Associated with Terms of Use

As part of this research, you may have to use things like a phone, website/app, electronic study diary (eDiary), or device that tracks information about you. These might collect information about you that may be shared with the researchers or people outside of the study. This could include personal health information, location, call logs, text message history, web browsing history, or social media use. You can find details about data collection and sharing in the Terms of Use, End User License Agreement, or Privacy Policy associated with the website, app, eDiary, or device. If you want to read these documents, ask the study team for a copy or instructions to access this information.

While the Terms of Use, End User License Agreement, or Privacy Policy may include statements limiting your rights if you are harmed as a result of your use of the website, app, eDiary, or device in this study, the study doctor, sponsor, institution, or agents are still responsible= for mistakes. You also do not give up any of your rights as a research participant.

### Future Contact

We may contact you to ask if you are interested in participating in additional visits related to the RECOVER Program. These follow-up calls and visits are optional and are a part of this consent form. If you agree to join further research, you will be told about additional follow-up calls or visits to expect and you will be asked to sign a separate consent form.

## PAYMENT AND COSTS

### Will I be paid for being in this study?

You may receive up to $3,950 for participating in this study. This amount includes $1,100 for completing the study visits:

- $300 after completing the Baseline activities (Visit 1)
- $100 after completing the Middle of Intervention activities (Visit 2 - Virtual)

- $400 after completing the End of Intervention activities and return of study equipment (Visit 3)
- $300 after completing the End of Study activities (Visit 4)

This amount also includes $1,250-$2,000 for completing the study intervention you are assigned (for example, BrainHQ, BrainHQ active comparator, BrainHQ plus PASC-CoRE, and BrainHQ plus tDCS-active or tDCS-comparator):

- $125-$200 per week for 10 weeks for completing at least 80% of the intervention. This means that to receive the money each week, you must complete 4 out of 5 days of BrainHQ sessions, tDCS sessions (if applicable), and all PASC-CoRE session(s) (if applicable) for the week. Participants in the PASC-CoRE group will receive the higher payment because it will take them more time to complete the study interventions. Payment may take up to 5 business days after weekly intervention completion.

You may also receive up to $300 for your stool (poop) samples ($300 for the second sample). There is no payment if you only submit one sample. You may also receive up to $450 for your blood samples ($150 per visit).

You may receive up to $100 for online surveys following study assessments ($25 per survey).

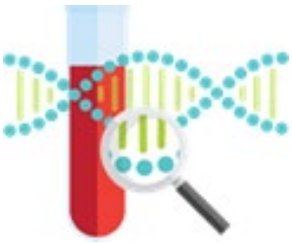
**Do I have to pay anything to be in this study?**
No. There will be no charge to you or your health insurance provider for taking part in this study. All tests and the study interventions needed for this study that are not part of your usual medical care will be paid by the study. “Usual medical care” is the care you would receive whether or not you are part of this study. If you receive your usual medical care during the study, your health insurance provider will be billed for that care, as it is unrelated to the study.

**What should I do if I become ill or injured during the study?**
If you become ill or are injured while you are in the study, get the medical care that you need right away. You should tell the healthcare provider treating you that you are participating in this study. If you tell the study staff that you think you have been injured, they will help you get the care you need. However, there is no commitment by the study site, your healthcare providers or study doctors, any device provider, Duke University (Duke Clinical Research Institute), or the NIH to cover the cost of medical care or provide monetary compensation in the event of a study-related injury. The study sponsor has no plans to pay for the cost of any extra care beyond what is provided as part of the study.

By signing this document, you will not lose any of your legal rights or release anyone involved in the research from responsibility for possible mistakes.

## BIOREPOSITORY: RESEARCH USE OF DATA AND BIOSPECIMENS

**What is a Biospecimen?**



A biospecimen is a sample such as urine or blood taken from your body for tests. With your permission, these samples—blood and stool (poop), —will be sent to a storage place called the RECOVER Research Biorepository at Mayo Clinic in Rochester, Minnesota. They will use these samples for research on COVID and the long-term effects of COVID. These samples may also be used for research on other health problems.

**Why are biospecimens needed?**

Biospecimens can tell researchers a lot. For example, blood is made up of clear fluids called serum and plasma, which contain substances like hormones, antibodies, and other substances that can be measured. Blood also has cells that float in the bloodstream. These cells include red blood cells (which give blood its red color and provide oxygen throughout our body), platelets (which help our blood to clot), and white blood cells (which fight infection).

Plasma and serum from a blood sample contain many substances. New substances are still being discovered, and methods for measuring these substances are being developed all the time. Tests to measure the amount or presence of a substance are used by doctors to assess health.

Some substances found in biospecimens are called “biomarkers.” Biomarkers are things that can be measured and may provide important information about Long COVID. An example of a biomarker is blood sugar level in diabetes. Biomarkers may help predict how a patient will respond to a treatment.

**How will my biospecimens be used for research?**

In this study, biospecimens will be used to see how the study intervention affects your immune system (body’s defense against infection). We will also look for evidence that the COVID-19 virus or that other germs can be found in the biospecimens. The collection of these biospecimens is required as part of this study.

Your data and biospecimens might also be used for future research. The research may be about similar health issues related to this study or about unrelated diseases, conditions, or other types of research. These studies may be done by researchers at this institution or other institutions, including companies.

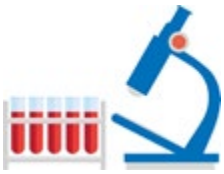
Although you will not receive any direct benefits, sharing your data and biospecimens with the RECOVER Research Biorepository may:

- Contribute to research that could help others in the future, improve medical care, and public health
- Help researchers make important discoveries about medical conditions and possible therapies
- Improve our understanding of how antiviral drugs and other interventions may work to reduce Long COVID symptoms
- Increase the possibility of developing new interventions and treatments related to Long COVID
- Enhance our understanding of how and why Long COVID affects people differently

**Will my biospecimens be used for genetic testing?**

This is optional. At the end of this consent form, you can decide if you want to allow researchers to use the samples we collect for genetic testing. Genetic testing looks at your DNA, the stuff that makes up your genes. Genes are like instructions that tell our bodies how to grow and function, and they are passed from parent to child. Researchers may also analyze all of the genes in your DNAs to study links to Long COVID. Usually, researchers study just a few of your genes that are linked to a disease or condition. Genetic tests can show if someone is more likely to have certain genetic diseases or conditions.

**Will researchers be able to identify me based on my data and biospecimens?**



We will do our best to protect your data and biospecimens during storage and when they are shared. However, there remains a possibility that someone could identify you. There is also the possibility that unauthorized people might access your data and biospecimens. In either case, we cannot reduce the risk to zero.

To protect your privacy, your name and identifying information will be removed from any data and biospecimens before they are shared with other researchers. Your de-identified data and biospecimens may be shared with researchers around the world. However, the decision to share your data is controlled by the National Institutes of Health (NIH) and future researchers will need to get NIH approval to access data. The data and biospecimens submitted to a storage place or shared for research use will not include any information that can personally identify you, and researchers cannot easily link your identifying information to the data and biospecimens.

Genetic Information Nondiscrimination Act. Your data and biospecimens from this study are protected by a federal law in the United States called the Genetic Information Nondiscrimination Act (GINA), that protects your genetic information from being used against you by health insurers and prevents certain genetic discrimination. GINA does not protect against genetic discrimination by companies that sell life insurance, disability insurance, or long-term care insurance. GINA does not protect you against discrimination based on a genetic disease or condition that is already diagnosed.

**Will I need to give additional permission for researchers to use my data?**
No. You do not need to give extra permission for future research to use your data. However, all future research studies will be approved by an independent scientific committee or ethics board.

**Will I be paid for any future use of my data and biospecimens?**
No. You will not be paid for any future use of your data or biospecimens. Your data and biospecimens will not be sold, but the use of your information or samples may lead to new tests, drugs, devices, or other products or services with commercial value. These products or services could be patented or licensed. There are no plans to provide any payment to you should this occur.

**How long will my data and biospecimens be stored for future use?**
Your data will be stored indefinitely. Your biospecimens from this study will be kept until they are used up.

**Will I get any results back from future research use of my data and biospecimens?**
No. You should not expect to get any results from future research using your data and biospecimens.

**What if I change my mind about future use of my data and biospecimens?**
Participating in this study means you agree to share your data and biospecimens. You can change your mind later, but researchers might still use your data and biospecimens if they have already been shared. If you do not want your data and biospecimens used for other research projects, you should not participate in this study.

If you decide that you do not want us to use or share your data and biospecimens, you can contact your study doctor's office to request they destroy any remaining samples. Please see the contact information at the beginning of this consent form. You will be notified of compliance with such a request, and supporting materials will be maintained for tracking.

If we are not able to link your samples back to you because they have already been de-identified, we will not be able to locate the samples to destroy them. In addition, if the data are needed to preserve the integrity of the study database for regulatory purposes, we will not be able to remove individual data until the regulatory processes are completed. We will also not be able to destroy any samples that have already been used or shared.

## USE OF PROTECTED HEALTH INFORMATION FOR RESEARCH

**What is Protected Health Information (PHI)?**


The PHI collected for this research study includes your name, address, phone number, email address, date of birth, Social Security number, and health information.

**Will my PHI remain private?**

We will make every effort to keep your PHI safe. We will store records in a locked cabinet or office or on a password-protected computer. We will give your study information a code and keep it separate from your personal record. Your identity and PHI will not be shared unless it is required to protect your safety, the safety of others, or if you give us permission to share it.

**Who will have access to or receive my PHI?**

Your PHI may be shared with others only if needed for reasons like determining the results of the study, making sure the study is being done correctly, and providing required reports.

Your medical and research records may be seen by:

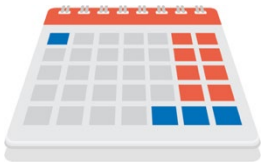
- Your study doctor and other study staff members
- The Sponsor (DCRI) and its representatives (including its affiliated companies that help carry out the research, such as study staff at New York University Langone (NYU), Emory University, and Icahn School of Medicine at Mount Sinai)
- People or organizations providing services for, or collaborating with, the Sponsor
- Other researchers, including researchers involved in the study at study sites other than the one where you are participating in the study
- Any organization that obtains all or part of the Sponsor's business or rights to the product under study
- Government or regulatory authorities, such as the FDA, including those located in other countries
- Advarra Institutional Review Board (IRB), an independent committee established to oversee the study and help protect the rights of research participants
- A team of health experts called the Data and Safety Monitoring Board, chosen by the NIH, who will regularly monitor the safety of study participants and the progress of the study overall
- Future researchers who access study data from the National Heart, Lung, and Blood Institute's BioData Catalyst® (the data repository for the study).

In addition:

- If we cannot reach you during the study to confirm your health status, we may search for you or assign a study team member to search for you using publicly available information to check on your health and well-being.

Those who receive your information for the purpose of conducting the study may share it without your permission. Federal privacy rules may not apply to these groups. However, these groups have their own rules and codes to make sure that all efforts, within reason, will be made to keep your PHI private.

**How long will you keep my PHI?**



We will keep your permission to use and share your PHI for 6 years.

You may take back your permission to use and share your PHI at any time by writing to the study doctor at the address listed on page 1 of this consent form. If you do this, you will not be able to stay in this study. We will not collect new information, but PHI that has already been collected may still be used and given to others as described in this consent form.

**What about my medical record?**

Information about your participation in this research will be in your medical record. Other than you, only people who have access to your medical record (like your study doctor or study nurses) will be able to see this part of your medical record. The study staff may send copies of parts of your medical record to the Duke Clinical Research Institute (DCRI) to monitor the study. Monitoring means DCRI staff will review study records, including your signed consent, to make sure that your information was entered correctly in the study records.

Like all your other information, we will keep this data as safe and secure as possible. During the study, you will not be able to access your health data in the study record to make sure the study results are accurate. You will be able to access your study health information when the study is over.

**What happens if I do not want to share my PHI with you?**

If you decide not to sign this consent form, you will not be able to take part in the study. If you take back your permission for us to use your PHI, you will not be able to continue in this study.

## STATEMENT OF CONSENT

I have read this consent form and its contents were explained. My questions have been answered. I voluntarily agree to allow study staff to collect, use, and share my health information as specified in this form. I will receive a signed and dated copy of this form for my records. I am not giving up any of my legal rights by signing this form.

_____
Printed Name of Participant

_____ _____
Signature of Participant Date

**How can I learn more about my legal rights while participating in this study?**
The Public Readiness and Emergency Preparedness (PREP) Declaration was issued by the U.S. Department of Health and Human Services on March 10, 2020. This declaration may limit the legal rights of a participant in a COVID-19 clinical study that uses a drug, device, or vaccine designed to treat, diagnose, cure, or prevent COVID-19. This includes the study equipment. Participants using the study equipment may have limits on their right to sue the manufacturers, the study sponsor, healthcare providers, and others for significant injuries and adverse reactions. Under some circumstances, compensation may still be available under the PREP Declaration for certain participants who sustain injuries. To find out more, go to hrsa.gov/cicp/about/index.html or call 1-855-266-2427.

## WHOM TO CONTACT ABOUT THIS STUDY

If you seek emergency care or you are admitted to a hospital during the study, tell the healthcare provider treating you that you are participating in this research study.

During the study, if you experience any medical problems, get a research-related injury, or have questions, concerns, or complaints about the study such as:

- Whom to contact in the case of a research-related injury or illness;
- Payment or compensation for being in the study, if any;
- Your responsibilities as a research participant;
- Eligibility to participate in the study;
- The study doctor's or study site's decision to withdraw you from participation;
- Results of tests and/or procedures;

**Please contact the study doctor at the telephone number listed on the first page of this consent form.**

If you have any questions about your rights as a research participant, contact the study's institutional review board (IRB). An IRB is an independent committee established to help protect the rights of research participants. You may contact the IRB:

- By **mail**: Study Subject Adviser
  Advarra IRB
  6100 Merriweather Dr., Suite 600
  Columbia, MD 21044
- or call **toll-free:** 877-992-4724
- or by **email:** adviser@advarra.com

Please include the following reference number if you contact the IRB's Study Subject Adviser: Pro00070287.

## OPTIONAL: SAMPLE COLLECTION FOR GENETIC TESTING

Please **initial** the appropriate line below to let us know whether or not you want to allow your samples to be used for genetic testing. By writing your initials below, you confirm you have been told that you can still participate in the study without providing samples for genetic testing.

| | |
|---|---|
| **Initials** _____ | **Yes,** I give study staff permission to collect samples for future unspecified genetic testing. |
| **Initials** _____ | **No,** I do not give study staff permission to collect samples for future unspecified genetic testing. |

## STATEMENT OF CONSENT

A copy of this consent form will be given to you. The purpose of this study, the procedures to be followed, and the risks and benefits have been explained to me. I have been allowed to ask questions, and my questions have been answered to my satisfaction. I have been told who to contact if I have questions, to discuss problems, concerns, or suggestions related to the research, or to get information about the research. I have read this consent form and agree to be in this study, with the understanding that I may withdraw at any time. I have been told that I will be given a signed and dated copy of this consent form.

### Participant

**Print name:** _____

**Signature:** _____

**Date & Time:** _____

### Person Who Obtained Consent

**Print name:** _____

**Signature:** _____

**Date & Time:** _____