

The Official Newsletter of the **STROKE RECOVERY PROGRAM**

ONGOING STUDIES:

vREHAB

Study aiming to evaluate the safety, usability, and efficacy of a virtual reality biofeedback system to promote recovery of arm and hand function in the acute period after stroke.

NEUROCOACH

A virtual therapist for stroke rehab therapy, connecting patients to their occupational therapist from the comfort of their home to promote recovery.

STROKECOG

Tracking memory and cognition over time with annual testing and a small blood draw to find biomarkers.

VTS REHAB GLOVE

Investigating new wearable stimulation devices for hand rehabilitation after stroke using the VTS Rehab Glove, a wireless, computerized vibratory glove.



RECRUITING LEADERS INTERESTED IN A STROKE GROUP?

The Stanford Stroke Recovery Program is hosting a participant led Stroke Group. This would be a space to discuss experiences related to your post-stroke recovery, communicate needs directly to research teams, learn about ongoing studies as well as new and upcoming studies and foster a sense of community. We would hope to host these Zoom meetings quarterly and are interested in recruiting our participants to lead this program. If you are interested, in participating or leading a group like this please reach out to mmendez2@stanford.edu for further details.

STANFORD ONLINE RESEARCH SURVEY

Take the Stanford University online research survey and help stroke device design researchers build more inclusive rehabilitation technology. Tell us about your experiences:

Participa en la encuesta de investigación en línea de Stanford University y ayuda a los investigadores de diseño de dispositivos de derrame/accidente cerebrovascular a crear una tecnología de rehabilitación más inclusiva. Cuéntanos sus experiencias:

<http://stroke-tech.stanford.edu>

INTERNATIONAL STROKE CONFERENCE

The Stroke Recovery team had the opportunity of presenting their research at the 2022 International Stroke Conference hosted in New Orleans, Louisiana. With the help of our participants, the team was able to analyze preliminary data collected over the past few years to answer questions related to stroke recovery, investigating the presentation of depression and inflammatory markers in the blood samples, as well as the difference in results between a short and long neuropsychological test, and the difference between objective and subjective cognitive and motor tests.

To begin to understand post-stroke depression, a condition that affects about one third of stroke survivors, we tested blood from participants who completed the Stroke Impact Scale survey, a way to measure depression. We identified 202 proteins that are either higher or lower in stroke survivors with depression and identified novel biological pathways that are altered in depression after stroke. These proteins are clues as to what causes depression after stroke. Now we have a starting point to study them in the lab, and hopefully develop new treatments that will help our participants and other stroke survivors in the future. Additionally, researchers analyzed inflammatory markers and found that infections are uncommon during acute hospitalizations of ischemic stroke survivors who return for comprehensive testing 5-13 months later. White Blood Cell counts greater than 11 within the first week after stroke may be a marker of later inflammation and predicts more chronic depression and worse cognitive outcomes in this population. In the neuropsychological tests, depression was significantly associated with all 3 of the long-term functional outcomes we examined. Overall, analyses indicated that long-term functioning outcomes are more closely related to psychological symptoms than to cognitive performance. When looking at self reported tests and comparing them to our objective measures, self-report did not align with objective assessments of memory or motor functioning but fatigue and depression did play a role in long-term stroke outcomes. We are especially grateful to our participants who have made this research and abstract publications possible for our team. Thank you for your collaboration!



ENROLLMENT MILESTONES

Our collaborators at the University of Manchester have begun enrolling for StrokeCog and are well on their way with 70 patients enrolled in just their first couple months. Meanwhile, Stanford also celebrates enrollment milestones with 221 participants enrolled in the StrokeCog research study.

SUPPORT THE STANFORD STROKE RECOVERY PROGRAM

Learn more. Visit our website to learn more about stroke recovery and find more information about our ongoing trials.

Participate. Could you or someone you know benefit from participating in one of our studies? Let us know! Contact us for more information or visit ClinicalTrials.gov to find ongoing clinical trials near you.

Donate. Consider contributing to our cause and help others by supporting the research that helps develop novel therapies.

Contact Us. 650.723.8886 StrokeRecovery@stanford.edu <https://stan.md/StrokeRecovery>