

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

WELCOME NEW STUDIES!

The Stanford Stroke Center is excited to announce the start of 2 new studies: StrokeCog BBB and Brain Computer Interfaces and Disability: Developing an Inclusive Ethical Framework (BCE-DIF). Both studies look to understand different aspects of brain injury and recovery.



MRI- Magnetic Resonance Imaging

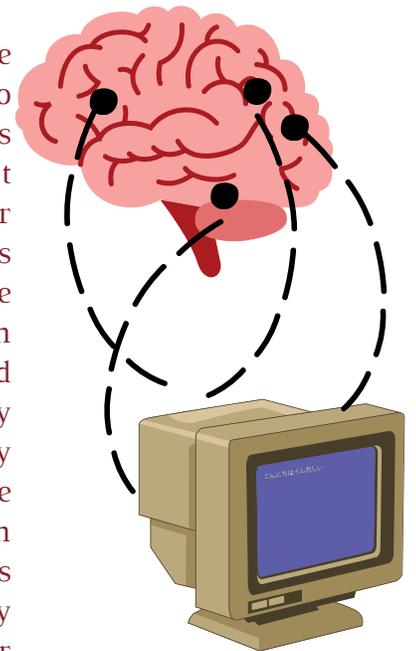
A magnetic resonance imaging scan (MRI) uses a large magnet and a computer to take pictures showing only a few layers of body tissue at a time.

STROKECOG BBB

The original StrokeCog study measures the long-term effects of stroke on a person's memory and thinking and whether immune responses play a role in changes to memory and thinking after stroke. Participants who volunteer for the study do yearly tests of their memory and thinking and donate blood. The new StrokeCog BBB is a 5-year study funded by the National Institutes of Health that will add MRI scans to the study protocol and will include Columbia University in New York and the University of Manchester in England. The MRI scans look at the brain and examine brain blood vessel function. The study will test whether leakage in brain blood vessels is a sign that a person is at risk of dementia. It will also test blood markers to find ways to identify people at risk of developing memory problems after stroke. The blood measures also help us learn more about the causes of dementia after stroke. With this knowledge and basic science research, we hope the next step will be to test therapies for memory loss after stroke.

BCI-DEF

Brain Computer Interfaces and Disability: Developing an Inclusive Ethical Framework (BCI-DEF) is a research study that aims to understand perceptions about the benefits, risks, and ethical challenges of Brain Computer Interface (BCI) technology. BCI is technology that allows a user to interact with a computer using signals from their brain. These devices can allow a user to perform tasks, such as communication and movement, which they would otherwise be unable to perform due to neurologic injury. We hope that the information gained as part of this study will help future patients, families, and clinicians make informed decisions regarding BCI use. This study involves watching a series of educational videos that convey key concepts about BCI, take a survey, and complete a 60–90-minute interview to discuss perspectives about BCI technology. This research study is looking to enroll a total of 110 participants: 40 participants with neurologic disability (TBI or stroke), 20 family member/caregivers, and 50 physicians who care for patients after brain injury.



Please reach out to strokerecovery@stanford.edu if you are interested in participating.

SUPPORT THE STANFORD STROKE RECOVERY PROGRAM

Our research could not go forward without our participants, who generously give their time. We are always looking for volunteers interested in our studies, and we now have some exciting opportunities for healthy volunteers who haven't had a stroke. If you have not yet volunteered for a study, please contact us with the information below to learn more. Although our research is largely funded by the National Institutes of Health and several foundations, philanthropic funding is invaluable in filling gaps, kickstarting earlier stage and experimental projects, and supporting us in testing and commercializing cutting-edge therapies. Please reach out to our Medical Center of Development team to learn more about making an impact with your year-end gift here:

<https://medicalgiving.stanford.edu/ways-to-give.html>

If you'd like to sign up to be contacted about possible studies in the future or receive other updates, please reach out to:

Phone: 650.723.8886

Email: StrokeRecovery@stanford.edu

Website: <https://stan.md/StrokeRecovery>

Thank you for your support of our research to date. We are truly grateful.



MEET THE TEAM: ELIZABETH VAZQUEZ

Elizabeth is a 4th year PhD candidate in Mechanical Engineering. Her work focuses on creating more accessible technology for stroke survivors with motor disabilities. Currently she is working on a survey and interview study to better understand the needs, resources, and goals of stroke survivors, particularly those with fewer resources.

INVITATION TO PARTICIPATE IN A STUDENT PROJECT

A MESSAGE FROM THE COURSE INSTRUCTOR DAVID L. JAFFE



My course at Stanford is called **Perspectives in Assistive Technology** is in need of candidate projects for students to pursue. Student teams work with people with disabilities and older adults living in the local community to address a challenge, problem, or struggle they experience by designing and creating an assistive technology device. You can submit a **one-sentence description** of the problem that you want addressed. Project suggestions should address a real challenge that is not addressed by existing commercial products and should target challenges including performing tasks such as working, learning, moving, communicating, accessing home products, or daily living activities such as cooking, cleaning, creative expression, and pursuing happiness. *The most important requirements are availability of a local person with a disability or older adult who would benefit and work with a student team, no risk of harm or injury to the user, and a suitable solution isn't already commercially available.*

Your contributions and participation will be much appreciated. For more information refer here: <http://web.stanford.edu/class/engr110/project-ideas.html>, and if interested, contact **David L. Jaffe** at davejaffe@stanford.edu by **January 1st**.