A. Charities

a. Brain aneurysm foundation

i. https://www.bafound.org/

- Funded nearly 5.5 million to date towards brain aneurysm research in the US and Canada.
- Focuses their research on making early detection better and advancing treatment methods further. Their goal is for better outcomes for their patients.
- Screen people that do not qualify to otherwise get screened, but may be at risk through family history. They're looking to broaden the availability of screening for aneurysms.
- Their goal is to be able to identify aneurysms before they rupture, hopefully preventing many fatal strokes down the line.

ii. donate

b. University of Pittsburgh

i. https://www.neurology.pitt.edu/institutes-centers/upmc-stroke-institute

- The Stroke Institute is made up of stroke-focused inpatient services offered at UPMC Presbyterian, UPMC Mercy, and UPMC Shadyside.
- Annually, over 2000 patients are admitted.
- Dedicated to further educating health care professionals and the public.
- NIH StrokeNet is a group of clinical research trials, being conducted since 2013.
- Over 400 hospitals contribute to these funded trials.

- Offer a one year fellowship program to aspiring trainees in neurology, neurosurgery, emergency medicine, critical care, and rehabilitation medicine.

B. Research

a. National Science Foundation

i. The goal of this project is to advance the scientific study of brain functional changes after a stroke and pioneer a tailored rehabilitation strategy that fits each individual

ii. seeks to combine different imaging methods to guide electrical stimulation to the brain that improves the recovery of movement

iii. This project will address this limitation and establish a unique rehabilitation engineering research paradigm based on a novel multi-modal brain imaging approach and a closed-loop high-definition transcranial direct current stimulation (HD-tDCS) platform. This new approach will precisely assess the changes to motor control in an injured brain and identify the key network to target for more precise HD-tDCS stimulation

iv. 1) Identify and characterize individualized brain networks for movement control in injured brains; 2) Model and evaluate the dynamic effect of HD-tDCS on a live brain to enable targeted, precision stimulation of brain networks; and 3) Develop closed-loop imaging and neurofeedback-guided HD-tDCS to improve brain function and behavior outcomes.

b. General info about strokes

c. research
    i. different kinds of interventions to prevent further injury
    ii. ways to recover
    iii. rehab
    iv. role of genetics
    v. role of race and geographical location and age
    vi. ways to restore blood flow, ways to extend the amount of time to restore blood flow
d. stroke therapies article
    i. uric acid is a promising treatment for acute ischemic strokes
e. history of stroke research
    i. timeline