Recruitment for a project testing brain stimulation in people with ataxia

Dr West, neuroscientist, and his team at the Institute of Neurology, University College London are now recruiting for their project testing brain stimulation in people with ataxia. They are developing a gentle, non-invasive form of electrical brain stimulation that targets the cerebellum, the part of the brain that coordinates movement. The long-term aim is a personalised treatment that works with the brain, adjusting to what it is doing in real time. They are starting with arm and hand coordination, such as the overshooting and undershooting that can cause difficulties in people with ataxia.

Study participants will undertake non-invasive investigations including an MRI scan to look at the structure of the brain, portable magnetoencephalopgraphy (MEG) and electroencephalography (EEG) to look at brain activity, and surface electromyography (EMG) to look at muscle activity, to understand how changes in the brain lead to impaired coordination. The study will also evaluate whether targeted non-invasive brain stimulation (NIBS) of the cerebellum improves coordination in people with ataxia. Some participants will therefore go on to receive electrical brain stimulation. NIBS involves applying small sticky pads (electrodes) to the scalp which influence brain cell activity with a very small electrical current in a gentle and non-invasive way.

They are looking for adults whose ataxia mainly affects coordination, balance and speech, rather than causing stiffness, weakness, numbness or tremor. This includes types such as SCA6. Because the stimulation targets the cerebellum, starting with this group gives them the clearest test of whether it works. They hope to include a wider range of ataxias in future. Taking part involves two or three visits to University College London, with the longest visit requiring about a half day.

If you are interested in taking part or would like more information, please contact:
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Coming soon - walking and balance: People with ataxia on the project's Group told Dr West that walking is one of the symptoms that matters most to them. A new PhD student is joining Dr West's team to explore stimulation for standing, balance and walking. They are not recruiting for this yet but watch this space for future developments!