

Parkinson's Disease Research Participants Invited

We are conducting this study to better understand Parkinson's disease motor and cognitive dysfunctions. We are interested in developing new ways to improve motor and cognitive performances in Parkinson's disease. This particular research study investigates whether mild brain stimulation can improve frontal brain activity and cognitive and motor performance. To stimulate the brain, we will be using transcranial magnetic or transcranial electrical stimulation, which is a small current and have no severe risk. There will be only fewer mild risks such as scalp discomfort, headache and/or neck pain, irritation of the skin, but these issues will go away after few minutes.

The study will take place in Lee Medical Building, Room No.144,414 E. Clark St. Vermillion, SD. It will involve either one visit or two visits. Compensation for participating in our study will be provided (20\$/hour). If you are driven here, we will reimburse your parking fee and also compensate you for your travel time. You will spend 2-3 hours to complete the study. If you are selected and agree to continue your participation for a second appointment for further data collection, that appointment will take again 2-3 hours and will be scheduled within 2 weeks from your first appointment.

If you agree to participate, you will be asked to complete few questionnaire forms and motor and cognitive tasks. Additionally, we plan to record brain waves during the study with scalp EEG. This means we will apply a set of leads onto your scalp using a type of gel. The EEG is non-invasive, but your hair may look a little messy from the gel we use for the leads. This gel can be rinsed out with water. This study is completely voluntary and you do not have to participate.

You can participate in the study either with ON medications or both ON/OFF medications. If you participate in OFF med study, then you will have to agree to not take your previous night and next morning anti-parkinsonian medication (Levodopa) before your study visit. Your motor performances will be compromised due to being off your medication. You will be slow to execute motor tasks. You will have rigidity and may have tremor. But your motor condition will not worsen. If you will feel unwell/uncomfortable during the experiment then you can tell **Dr. Arun Singh**, we will stop the experiment and you will be given medicines. Please bring your Parkinson's medicines with you to the study visit. If you will be off your medication, we ask that you have a family member or friend assist in bringing you in to participate in this study.

Your participation is completely voluntary, and you can decline for any reason, or not give a reason for declining. Would you like to participate in this study?

- If **NO**: Okay, thank you for your time.
- If **YES**: Great!

If interested, I will to ask you a few other questions.

- Do you have any history of brain injury or epilepsy?
- Do you have a history of neuropsychiatric illness such as schizophrenia, or depression?

We are currently scheduling participants, do you have a date and time that might work for you?
Thank you for your willingness to participate!

If interested, please contact:

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