## Brief info on rTMS Alzheimer's Study rTMS Lab, Riverview Health Center University of Manitoba

rTMS stands for Repetitive Transcranial Magnetic Stimulation, which uses short magnetic pulses from a coil placed on the scalp. It is a non-invasive procedure that doesn't involve any medication. This technology has been used to successfully treat depression, and it is also being studied for a number of other neurological conditions (Parkinson's, concussion, stroke, etc). Basically, we use magnetic pulses to cause neurons in the brain to activate, and hopefully this will train the neurons to perform better in the future. rTMS has only mild side effects: some people report a mild headache which is easily treated with Tylenol, and there is an extremely small risk of seizure. For that reason, individuals with a history of epilepsy and/or seizures are excluded from the study.

The study involves either 10 treatments performed over 2 weeks or 20 treatments performed over 4 weeks. Treatments are done from Monday to Friday. Patients will be randomly assigned to one of these two groups upon signing up for the study. Additionally there are 6 assessments - before treatment, after 2 weeks of treatment, after 4 weeks of treatment, and then every 6 weeks from the end of treatment up to 6 months after the start of the study (3 additional assessments).

We do the treatments in the administration building of Riverview Health Center (1 Morley Avenue, Winnipeg). Each treatment takes about 30 minutes and the assessments take a couple of hours. We are pretty flexible in terms of what time of day the treatments are at, so if you prefer a particular time we can probably work around that.

Also, in order to make sure that we don't just find a placebo effect, we have to randomly assign half of our volunteers to receive "control" treatment, which would be a fake treatment with no real effects. We would not be able to tell you until after the study finished which group you were in. However, we promise to give the real treatment to those in placebo group after 6 months of their first participation.

If you are interested to participate in this study, please ask your family physician to refer you to either **Dr. Mandana Modirrousta (Fax #: 204-233 8051)** or to **Dr. Craig Omelan (Fax #: 204 237-6264)**; they are both at St. Boniface. During the visit, please mention that you're interested to participate in this rTMS treatment study. All of our potential participants must be seen by one of our two psychiatrist team members and being checked for eligibility.

Once you are done with above referral, in order for us to follow up, please let us know which doctor you or your family member has been referred to by sending an email to:

Zahra Moussavi Zahra. Moussavi@umanitoba.ca, and Grant Rutherford umruthe4@myumanitoba.ca

If you have any other questions you may reach us by above emails (<u>preferred</u>) or phone:

Grant Rutherford: 204-478-6163 or Zahra Moussavi: 204-474-7023