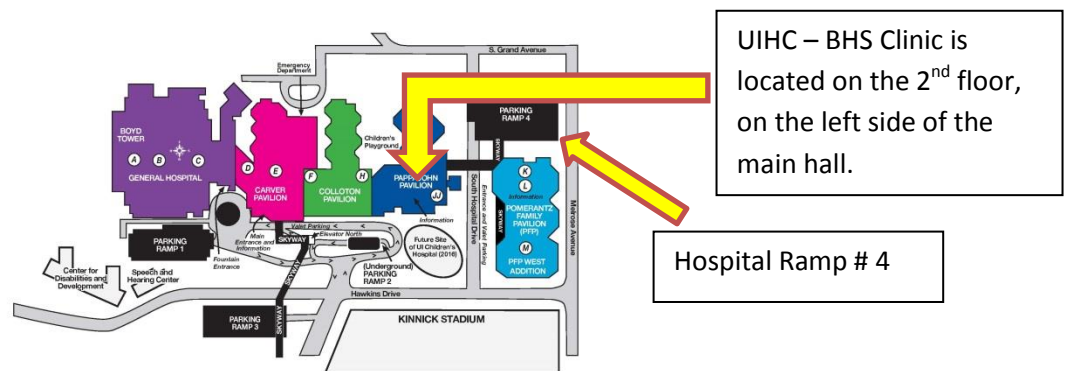
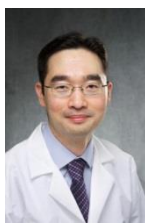


rTMS for the Treatment of Depression – What to Expect

1) Following the initial referral from your primary psychiatrist to the UIHC Noninvasive Brain Stimulation Clinic one of our staff will contact you. Your initial assessment appointment will be scheduled for a Wednesday morning in the Behavioral Health Services Clinic on the second floor of the Pappajohn Pavilion, here at UIHC. This appointment will take approximately two hours. Parking ramp number 4 provides the easiest access to this area of the hospital by use of the second floor skywalk.



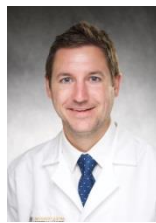
2) Once you arrive at the Behavioral Health Clinic, check in at the desk and our receptionist will inform the physicians of your arrival. The initial assessment will include meetings with two of our five physicians.



Dr. Nam



Dr. Beeghly



Dr. Trapp



Dr. Boes



Dr. Crocker

This first meeting allows our team to gather more information about you and your illness. This is done to assure repetitive Transcranial Magnetic Stimulation (rTMS) is a fitting treatment option for your specific needs. This visit will include a general health history, and a more in-depth look at your current depressive episode. There will also be two questionnaires to be filled out. You should complete the Patient Health Questionnaire – 9, and one of our psychiatrists will complete a Montgomery – Asberg Depression Rating Scale during their portion of your meeting. If you are interested in pursuing rTMS as a

treatment option after you have learned more about it, and our team feels it is a good treatment option for your specific case, you will sign an agreement to initiate treatment with us.

3) Following the first visit with our team, our coordinators will initiate any insurance preauthorization that may be necessary. Dependent on your insurance type we may have you to sign a form that will allow us to obtain records from any outside therapists you may have seen. This is done for documentation of alternative treatment methods you have tried. Once insurance coverage has been arranged, you will be contacted by one of our coordinators to schedule your first treatment session. The treatments will occur in the Non-invasive Brain Stimulation Clinic. Detailed directions to our clinic can be emailed to you if they were not provided at your initial screening.

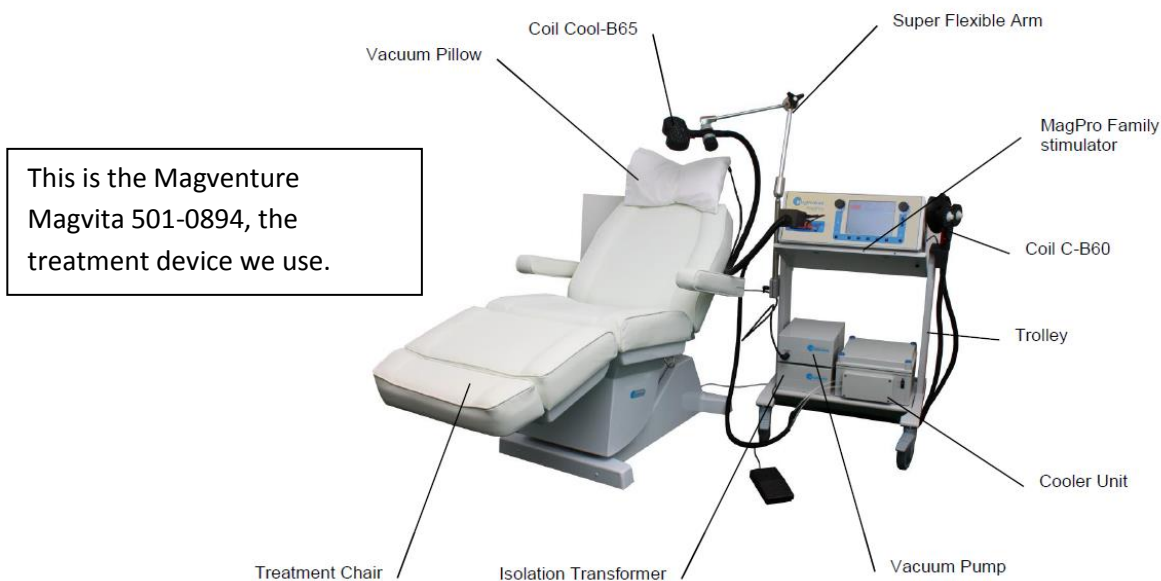


Janet



Chris

4) Your first rTMS treatment session will take slightly longer than the rest of your treatments because we will need to take a few measurements and tailor the treatment settings to match your specific neurophysiology. Upon your arrival in the waiting area you will be given a questionnaire to fill out, this will be done on your first visit and every Friday during your treatment course. Once our technician meets you at the reception area they will escort you to the treatment room. You will be seated in a large reclining chair similar to a dentist office chair. Our technician will measure your head to select the properly fitting cap to be used. This thin, tight fitting fabric cap will allow us to make note of landmarks that will help us locate the proper brain region to target for treatment delivery. After the markings have been made on the cap, and your **hearing protection** is in, you will be ready to begin. Your technician will begin by finding the area of the brain responsible for controlling movement in your right hand. This is done by administering single pulses of electromagnetic energy to the left side of your head. Once the area of strongest response has been located, the technician will mark an area 5.5 cm in front of this spot for the application repeated "*pulse trains*". Prior to beginning the repetitive stimulation treatment the technician will need to match the strength of stimulation pulses to your brain's excitability. This is done by applying single stimulation pulses and adjusting the machine output until the pulses result in movement of your right hand about 50 % of the time. This level of stimulation is known as your "*motor threshold*" and will be rechecked weekly during your treatment course.



5) Once the initial setup is configured to your physiology rTMS treatment can begin. This is the type of treatment session that will occur 4 out of 5 days each week. During the other treatment day, your motor threshold will be retested to assure treatments are occurring at a therapeutic energy level. The technician will change the treatment coil to one that is capable of delivering repetitive pulses. This coil will be placed over the region of the brain responsible for regulation of your mood. The typical treatment parameters will be set as follows;

- A) The electromagnetic stimulation level will be set to 120% of your motor threshold.
- B) The stimuli will be delivered at the rate of 10 pulses per second for 4 second periods called “trains”.
- C) Between each pulse train you will have a 26 second break called an “inter-train interval”. This is done to avoid over stimulating the area.
- d) This cycle will be repeated until 75 stimulation trains have been administered.

If you need to take a break or stretch at any point during your treatment just let the technician know and they will pause the stimulation trains. Please note small adjustments to the flexible arm holding the treatment coil may be required during the course of each session. During your treatment session feel free to read, talk with your technician, or just relax. Tablets and phones may be used during treatment sessions, but they must remain **30 cm** from the treatment coil to avoid electrical interference or damage to the device.

6) Following the delivery of the 75th stimulation train the technician will disable the coil and move the flexible arm holding it in place. Your treatment session is now complete. Please be careful when standing from the treatment chair as prolonged periods of little movement can cause dizziness if you

rise too quickly. Some patients report scalp tenderness or mild headache during their initial treatment sessions or shortly after. While this discomfort typically diminishes after a few treatment sessions it is not unusual for patients to take analgesic/pain reliever (such as aspirin, ibuprofen, acetaminophen, etc.) prior to a treatment session (please note analgesics can result in rebound headaches if taken too frequently and make sure to check allergic/adverse reactions related to them).

7) If you will miss a treatment session due to illness, weather, or other unavoidable detainment please notify us as soon as possible. The coordinator may be reached at (319)384-9162 or by email at christopher-sanborn@uiowa.edu . If there is no answer please leave a message as our technicians wear earplugs during the treatments.

8) During your course of rTMS treatments we will periodically schedule follow up visits with one of our psychiatrists so you have a chance to sit down and discuss the progression of your treatment course in depth. These appointments will last about 30 minutes and will typically be scheduled before or after your treatment session.