

## How you can participate

- Are you between the ages of 21 and 70?
- Do you have a diagnosis of major depression?
- Have medications not worked in treating your depression?
- You have never had Transcranial Magnetic Stimulation (TMS) before?
- Are you willing to have an MRI of your brain?

If you answered **YES** to all of these, you may be eligible to participate in this Depression Research Study.

**Call (404) 728-6470**

**for more information!**

## Additional Information

Optimization of TMS in the Treatment of Depression Study Sites:

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Atlanta, GA

Medical University of SC (843) 792-9222  
Charleston, SC

Columbia University (212) 543-5825  
New York, NY

University of WA (206) 731-2436  
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# Depression and Transcranial Magnetic Stimulation

*A Depression Research Study  
Funded by the  
National Institutes of Health  
2004-2008*

[www.emoryhealthcare.org](http://www.emoryhealthcare.org)



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FUQUA CENTER FOR  
LATE-LIFE DEPRESSION

## What is TMS?

Transcranial magnetic stimulation (TMS) is an investigational procedure being studied as a treatment for major depression. With TMS, an electromagnetic coil creates a focused electrical current in a series of pulses in the brain. These pulses may have an antidepressant effect. Both the treatment and the machine used to deliver the treatment are experimental. The fact that they are experimental means that the Food and Drug Administration (FDA) has not yet approved TMS as a treatment for major depression. Studies involving TMS are being done to evaluate its safety and efficacy as a treatment for depression.

Earlier studies suggest TMS may have efficacy in up to 50% of patients with depression. However, the exact efficacy of TMS in depression is not known. This trial is designed to help establish the efficacy and safety of TMS as a treat-

ment for depression.

### How is TMS administered?

TMS is available in the United States through participating in research studies. The treatment is typically administered five times per week at the same time of day for three weeks or more. The patient is awake and alert during the treatment; there is no anesthesia involved. Each treatment takes less than one hour.

The TMS treatment is administered by a specially trained physician or registered nurse in a private treatment room. The most serious risk associated with TMS is seizure. All TMS administrators are trained in seizure management although seizures during TMS are very rare. Measures are taken to limit the likelihood of seizures such as not allowing patients who have a history of seizures into the study. More common side effects of TMS include mild pain on the scalp or headache and there may be side effects that are not yet known.

### How does TMS work?

TMS works by stimulating neurons through electromagnetic pulses. The TMS machine delivers a brief magnetic field when positioned over the head, which passes through the skull. This field is sufficient to induce an electrical current in brain tissues.

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