## **IMMEDIATE NEED**

## **UP TO TWO UNDERGRADUATE RESEARCH ASSISTANT**

## TOPIC: Research in Transcranial Magnetic Stimulation: Non-invasive, non-surgical TMS of human brain

**HOURS:** Up to 10 hours per week

PAY: \$10/hour

ADVISOR: Prof. David Jiles (Anson Marston Distinguished)

TO APPLY: Call or email Dr. Ikenna Nlebedim

4-7901, Email: nlebedim@iastate.edu

This undergraduate research opportunity gives students a chance to be directly involved in exciting research at the forefront of developments in bio-magnetics and health care. Students will participate in research in Transcranial Magnetic Stimulation (TMS) of the human brain in the Department of Electrical and Computer Engineering, Iowa State University. In addition, there will be opportunities to observe other research projects in the group, including development of magnetic materials for sensor applications, computer simulation of magnetic components, effects of microstructure on magnetic properties, hysteresis models, and magnetic methods for nondestructive evaluation.

The Magnetics Research Group (MRG) in the Department of Electrical and Computer Engineering has been awarded grants and contracts supporting a wide variety of research including new materials, new micromagnetic devices for various applications, materials processing methods, instrumentation development, theoretical modeling of magnetic properties, and design of transcranial magnetic stimulation coils using computer simulations and nondestructive evaluation.

