

Mailing Address

P.O. Box 4019
Atlanta, GA 30302-4019

Phone 404-413-1225
Fax 404-413-1230



Bradley Farrell
Assistant Professor

I) Research Interests

- a. Osseointegrated Limb Prosthesis design and evaluation
- b. Spinal Cord Stimulation to modulate pain and spasticity
- c. Biomechanics and Sensorimotor control

II) Current Research Projects

- a. Evaluating the effects of transcutaneous spinal cord stimulation on reflex behavior and autonomic function
- b. Developing a software app to identify upper extremity motor patterns

III) Research Skills

- a. Electrophysiology
 - i. H- reflex recording and analysis
 - ii. Posterior root muscle reflex assessment and analysis
 - iii. Motor evoked potential recording and analysis
 - iv. Contact heat evoked potential assessment and analysis
 - v. General electromyography (EMG) assessment
- b. Biomechanical assessment
 - i. Kinematic and kinetic quantification and analysis
 - ii. Joint and implant loading
 - iii. Implant design and fabrication
- c. Basic Skills
 - i. Matlab programming and modeling
 - ii. Quantitative research methodologies and statistical analysis
 - iii. Analog to digital recording and controls
 - iv. Animal survival surgery
 - v. Engineering design and prototyping