F. Joseph Halcomb III, MD Department of Biomedical Engineering Spring 2019 Seminar Series

Fridays at 3:00 pm unless otherwise stated* Robotics and Manufacturing Building, Room 323

January 18 Guigen Zhang, Chair and Professor, UK BME, "Becoming Imaginative: Enhancing Your Human Capital through the Pursuit of Science and Engineering Guided by Logic and Philosophy."

Amir Al-Bakrei, PhD Student, UK BME, "Modeling Spikes and Other Transients to Improve the Accuracy od Detection of High Frequency Oscillations."
Scott Thalman, MD, PhD candidate, UK BME, "Arterial Spin Labeling- What It Is; Why It's Important; and How It can be Better."

February 1 **George Pantalos**, Professor, Cardiothoracic Surgery, University of Louisville, "Adventures of a Cardiovascular Explorer- With and Without Gravity."

- 8 **Brad Hubbard**, PhD, Spinal Cord and Brian Injury Research Center, UK, "Experimental Modeling of Blast-Induced Neurotrauma: Insights and Approaches."
- Brandon Miller, MD, PhD, Pediatric Neurosurgery, UK, "Mechanisms of Brian Injury after Neonatal Intraventrical Hemmorrhage."
- Joseph Zwischenberger, MD, FACS, Chair, Department of Surgery, UK, TBD. Dongfang Wang, MD, Professor and Director of Artifical Organ Laboratory, College of Medicine, UK, TBD.

March 1 Mark Fritz, MD, Professor, Department of Otolaryngology-Head and Neck Surgery, UK, "Re- engineering the Larynx-Restoring Voice, Airway, and Swallowing"

- 8 Ahmed Bahrani, MS, PhD candidate, UK BME, "Cerebrovascular Disease: Methods of Diagnosis."
 Javad Mollakazemi, PhD Student, UK BME, "Target Frequency Band of Cognition and Tempo of Music: Cardiac Synchronous EEG."
- **David Pienkowski**, Associate Professor, UK BME, "Everything You Always Wanted to Know about Abstract Preparation (but were afraid to ask)."
- Lei Chen, Assistant Professor, Physiology and Spinal Cord and Brian Injury Research Center, UK, "Restoration of the Damaged CPU."

April 5 Siavash Mazdeyasna, PhD Student, UK BME, "Noncontact 3D Optical Imaging of Blood Flow Distributions in Tissues with Arbitary Geometrics." Mingjun Zhao, Research Assistant, UK BME, "Mapping Tissue Optical Properties and Hemodynamics using Noncontact Speckle Contrast Diffuse Correlation Tomography."

Chase Haddix, PhD Student, UK BME, "Neural Correlates of Graded Movement and Motor Imagery."
 Dillon Huffman, PhD Student, UK BME, "Non-Invasive Manipulation of REM Sleep in Mice Through Automated Vibro-Tactile Stimulation."

Dibya Biswal, PhD Student, UK BME, "Regular Camera in Daily Healthcare." **Matt Ballard**, MS Student, UK BME, "Biomechanical Effects of a Hip Orthosis on Lumbo Pelvic Coordination and Brian Activity Changes Detected with EEG." 19