The EPIC lab’s goal is to design and test human augmentation technology to improve mobility in humans performing agile and real-world tasks. We have designed a number of wearable robotic systems to improve human capability by integrating FHE technology to improve the real-time control of these systems. Our control systems use recent advances in sensor fusion, machine learning, and artificial intelligence to detect human intent and optimize wearable robotic assistance. We formally test these robotic systems in an advanced large scale human biomechanics testing facility.

**Research Focus**

- Robotic Exoskeletons
- Human Augmentation
- Machine Learning
- Myoelectric (EMG) Control
- Human Biomechanics
- Lower Limb Gait Assistance
- Real-time Control Systems
- Sensor Fusion Techniques
- Autonomous Systems
- Powered Prostheses
- Artificial Intelligence