



## **SPINAL CORD INJURY RESEARCH STUDIES AT THE UNIVERSITY OF LOUISVILLE/FRAZIER REHAB INSTITUTE**

Frazier Rehab Institute's Neuroscience Collaborative Center is a joint partnership between The Kentucky Spinal Cord Injury Research Center (KSCIRC), the University of Louisville's Department of Neurological Surgery and Division of Movement Disorders at Frazier, and Frazier Rehab Institute. The Center focuses on research in the area of neurological disorders including movement disorders and spinal cord injury.

The Human Locomotion Research Center's team is headed by Susan J. Harkema, Ph.D., a leading researcher in the field of neurological rehabilitation. She currently holds the positions of Professor in the Department of Neurological Surgery at U of L, Rehabilitation Research Director at the Kentucky Spinal Cord Injury Research Center and Director of Research at Frazier.

The research team is comprised of scientists, engineers, physicians, technicians and physical therapists who work together to understand how the nervous system works during human locomotion. The focus is on retraining the nervous system to facilitate the recovery of standing and stepping in individuals with spinal cord injury. Our studies investigate not only physiological characteristics that enable retraining of the nervous system to stand and walk, but also examine a number of issues secondary to spinal cord injury.

Below is a collection of studies that we have done in the past or are currently doing:

- Locomotor Training
- Functional electrical stimulation
- Brain Motor Control assessments
- Lung function
- Heart function
- Bone density
- Muscle assessments
- Complications related to spinal cord injuries
- Quality of life
- Observational studies related to your current treatment (NRN manuscripts)

If you are interested in becoming a research participant, the following is our process for establishing eligibility and determining your qualification for any current or future studies:

- Information about your spinal cord injury will be entered into our research database.
- Research investigators are immediately updated that you have been entered in the database.
- If you meet specific criteria for one of their particular studies, you will be contacted to discuss your role or interest as a potential participant.
- In the event that you are not eligible for one of our active studies, your name will remain in the database for future research opportunities.
- At any time you can request that your information be removed.