

Altering Hip Mechanics during Ambulation

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Joint mechanics have been linked with joint pain and injury. Modifying these mechanics can reduce joint damage. One way to alter mechanics during gait is by using novel robotic devices to assist or resist movements. My research focuses on using a pneumatically powered hip orthosis which alters mechanics to study locomotor adaptation in healthy subjects. A better understanding locomotor adaptation will allow the powered hip orthosis to be used as an innovative rehabilitation tool for people with hip pain.