

PhD in Progress

Diagnosing Chronic Low Back Pain: A biomechanical assessment of intervertebral motion in symptomatic and asymptomatic participants

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Aims:

1. To evaluate the diagnostic utility of measuring inter-vertebral motion in vivo
2. Develop standard operating procedures for lumbar spine quantitative video-fluoroscopy.
3. Employ the technology to compare inter-vertebral motion patterns in symptomatic and asymptomatic participants to determine the prevalence and types of motion characteristics in both groups
4. Investigate the relationship between these and the level of pain, disability and quality of life, and disc degeneration as seen on MRI scans.
5. The motion will be measured in both recumbent and weight-bearing conditions.

The detection of abnormal motion patterns and their relationship to Chronic non specific low back pain (CnsLBP) could lead to the identification of sub groups and thus create and improve the diagnoses of CNSLBP by defining diagnostic criteria for this group.