

## **ABSTRACT FROM THE STAR RESEARCH GRANTS AWARDED (2009)**

**Title:**                    **A Feasibility Trial of GrandStand<sup>®</sup> and Vibration Training in Frail Older People**

**Lead Investigator:**    **Associate Professor Andrew Jull**

Frailty in later age confers higher rates of mortality and morbidity. Individuals invariably spend frequent and lengthy periods in hospital. However, providing targeted and individualised rehabilitation in an in-patient setting is often difficult due to time restraints, poor coordination as well as patient fatigue. This research aims to explore the impact of two innovative interventions which may influence treatment for frail older people: GrandStand<sup>®</sup> measures sit-to-stand repetitions and provides visual feedback for the patient and family to ensure that rehabilitation continues seven days a week. Vibration training has been demonstrated to improve muscle mass with athletes but has never been trialled with older people in in-patient environments. We aim to determine the safety of such interventions and explore the impact on physical function and quality of life. Should the interventions be safe and well-tolerated, a larger study to determine their effectiveness as a form of rehabilitation will be developed.