Neuromechanics of Stepping for Balance and Mobility in Aging and Neurological Disorders

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Abstract: This presentation will cover neuromechanical factors underlying the initiation and execution of stepping performance for dynamic balance recovery and mobility. A focus is on the key changes in the control of stepping that contribute to impaired balance function and loss of mobility in older people and in individuals with neurological disorders such as Parkinson’s disease and chronic hemiparesis due to stroke. Implications of these studies for clinical assessment and rehabilitation interventions will be provided.