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Mobile Neuroimaging and Mobility in Parkinson's Disease

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Mobile Neuroimaging and Mobility in Parkinson's Disease

Attention, an important aspect of human cognition, is needed for safe mobility and navigation through the environment. With age, the ability to move and navigate through the world requires greater cognitive resources. Previous brain imaging research has shown that mobility impairments are associated with reduced attention. However, previous work was limited to assessing attention while participants were stationary and/or in a laboratory environment, which does not necessarily translate to what would occur in the real-world. My research will use mobile neuroimaging during walking to observe and compare brain activity in a real-world environment across younger adults, older adults (with and without a history of falls), and adults diagnosed with Parkinson's disease. These findings have the potential to expand current understandings of brain function in Parkinson's disease, human mobility, and fall risk using real-world methods and technology.

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