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NeuRA
Discover. Conquer. Cure.

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Untangling **TAU** in ALZHEIMER'S DISEASE

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HOW Wii
helps after
a stroke

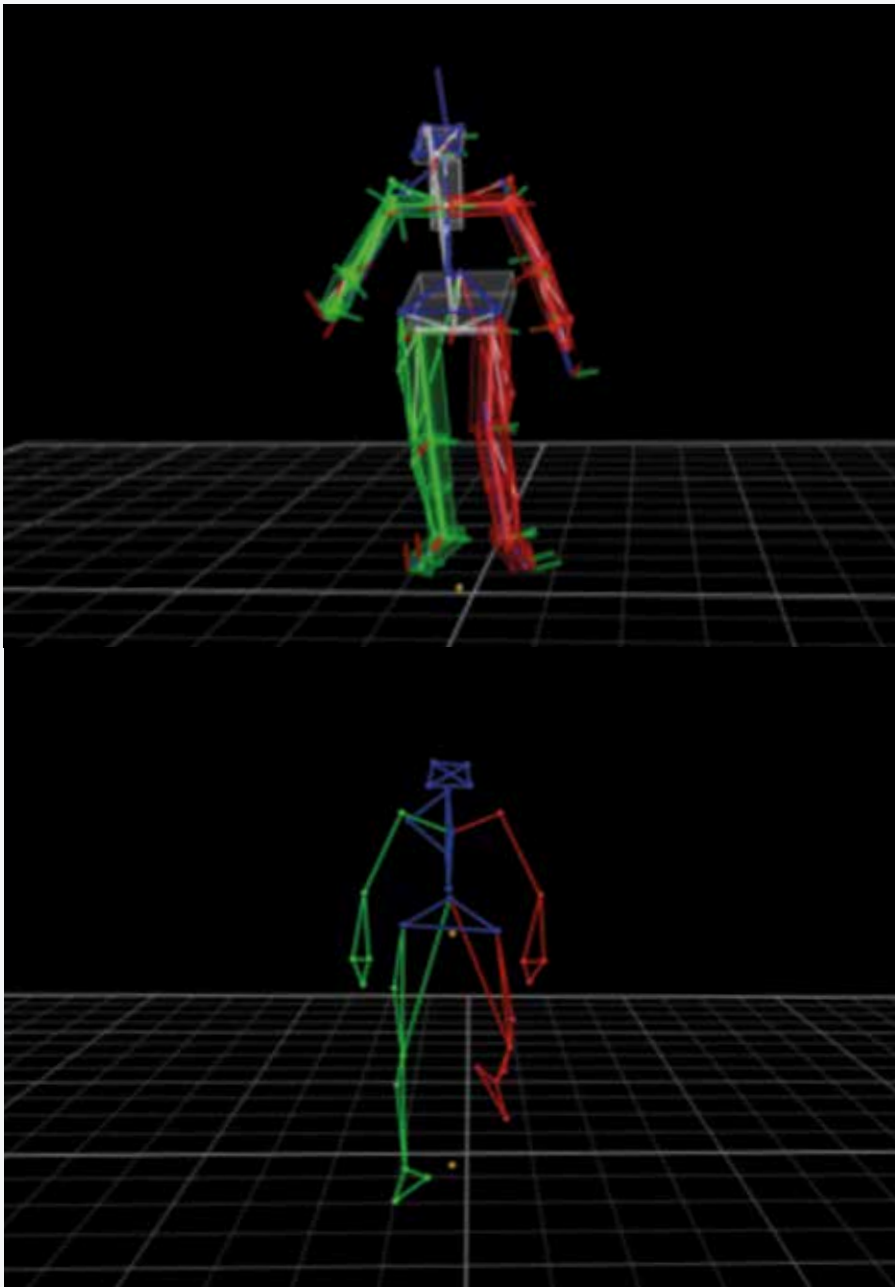
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Preventing
a key cause of
PARKINSON'S
DISEASE

NEW SLEEP
and back
pain trial

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LIGHTING the way

As part of our research to better understand the biomechanical factors that can lead to a fall, we use the Vicon Vantage 3D motion capture system to measure people's gait as they walk along our specially constructed pathway in the gait lab.

The Vicon system is capable of measuring movements from fine finger manipulations, to walking, running and negotiating obstacles.

During our studies, we place reflective markers on the skin (over bony landmarks) of participants to capture then analyse their movement. This system is integrated with in-floor force-measuring plates to give us an accurate understanding of how a person's gait and balance responses may help to prevent or increase the risk of a fall.

The Vicon system and force plates all work together to provides us with 3D kinematic (movements) and kinetics (forces) of gait, balance and other human movements, similar to what is pictured here, without the need for restrictive devices and cables.

The synchronisation of equipment and established processing software offers an incredible opportunity for researchers and research participants to work together to understand normal and atypical movement and inform fall prevention strategies.

05 Dr Daina Sturnieks affixing sensors used to measure gait



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