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Adaptability of gait and balance across the adult lifespan

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Propositions

Belonging to the thesis

Adaptability of gait and balance across the adult lifespan

By Danique Vervoort

1. Algorithms applied to the data captured during the iTUG have the potential to accurately distinguish age groups and patient populations in clinical practice – *This thesis*
2. In challenging walking situations, like split-belt walking, older adults need to prioritize gait adaptation in order to maintain walking and prevent adverse outcomes – *This thesis*
3. Changes in muscle activation underlie the changes in gait symmetry during split-belt adaptation – *This thesis*
4. With increasing age, healthy adults adopt an increased cadence as a balance control strategy when challenged by split-belt walking – *This thesis*
5. Dynamic balance should be challenged to assess aging effects on gait adaptation – *This thesis*
6. Walking speed has to be controlled when investigating age effects on gait – *This thesis*
7. Symmetry outcomes show the ability to re-establish symmetry during split-belt walking, but do not show how aging affects gait adaptability – *This thesis*
8. Nothing in the world is worth having or worth doing unless it means effort, pain, difficulty – *Theodore Roosevelt*