

# Track and treat Parkinson's disease using wearable sensors and MRI

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## **Track and treat Parkinson's disease using wearable sensors and MRI**

Margot Heijmans, 10 december 2021

1. Adaptive deep brain stimulation in Parkinson's disease first needs a feasible monitoring system before individualized fine-tuning can take place. *This thesis*
2. The combination of wearable sensors with the experience sampling method is feasible for monitoring Parkinson's disease patients in daily life. *This thesis*
3. Subjective tremor scores can be predicted with good correlations from objective data of wrist-worn sensors. *This thesis*
4. A combination of structural MRI characteristics may be helpful in the diagnostic work-up of Parkinson's disease. *This thesis*
5. Optimizing the electrode placement is only one of many possible improvements for deep brain stimulation in Parkinson's disease. *This thesis*
6. Small improvements in tracking and treating Parkinson's disease, like improved treatment adaptation, can have incredible effects on an individual's daily life. *Impact*
7. The Parkinson pandemic is preventable, not inevitable. *Ray Dorsey and others*
8. Being a successful scientist encompasses so much more than only the research part.
9. Patience, discipline and perseverance are the key ingredients for science.