Visualizing Parkinson's disease brain signatures using advanced MRI techniques

Stellingen behorende bij het proefschrift

Visualizing Parkinson's disease brain signatures using advanced MRI techniques

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1. Alterations in default mode network connectivity play an important role in the pathophysiology of cognitive impairment in Parkinson's disease. *This thesis*

2. White matter tract alterations serve a more prominent role than grey matter changes in the early stages of cognitive impairment in Parkinson's disease. *This thesis*

3. Neuromelanin related signal intensity in the locus coeruleus holds significant promise as a diagnostic tool to distinguish Parkinson's disease patients from healthy controls. *This thesis*

4. Ultra-high-field magnetic resonance imaging enables the visualization of small brain stem nuclei that are important in the pathophysiology of Parkinson's disease. *This thesis*

5. A combination of different biomarker techniques offers superior diagnostic accuracy and monitoring capabilities for Parkinson's disease compared to a single imaging biomarker approach. *This thesis*

6. There should be increased focus on translating imaging techniques utilized in research settings into methods that can be effectively applied in clinical practice.

7. Studying non-motor symptoms of Parkinson's disease is as least as important as studying motor symptoms.

8. In MRI, we're essentially using the body's own atoms to take pictures of itself. *Richard Ehman*

9. In examining disease, we gain wisdom about anatomy, physiology and biology. In examining the person with the disease, we gain wisdom about life. *Oliver Sacks*

10. The brain is like a muscle. When it is in use, we feel very good. Understanding is joyous. *Carl Sagan*

11. Pressure is a privilege. *Billie Jean King*