Stellingen behorende bij het proefschrift "Hereditary Early-onset Parkinsonism The Role of the FBXO7 Protein"

- 1. Mutations in the *FBXO7* gene cause PARK15, an autosomal recessive neurodegenerative disease presenting with early-onset parkinsonism and pyramidal disturbances (This thesis).
- 2. The common cellular abnormality found in the patients with PARK15 is the depletion of the FBXO7 longer isoform (This thesis).
- 3. An intact N-terminus is required for the nuclear FBXO7 localization, as N-terminal modification by PARK15-causing missense mutation or N-terminus tag lead to cytoplasmic mislocalization (This thesis).
- 4. The Fbxo7-deficient zebrafish model of PARK15 reproduces pathologic and behavioral hallmarks of human parkinsonism including dopaminergic neuronal loss and dopamine-dependent bradykinesia (This thesis).
- 5. The expression of the FBXO7 protein in Lewy bodies and Lewy neurites suggests a possible role in the pathogenesis of the common forms of Parkinson disease (This thesis).
- 6. Although the majority of Parkinson's disease is sporadic, specific genetic defects in rare familial cases have provided unique insights into the disease pathogenesis (Dawson TM, *et al.* Neuron, 2010)
- 7. Essential for the neuropathological diagnosis of sporadic PD are α -synuclein immunopositive Lewy neurites and Lewy bodies (Braak H, *et al.* Neurobiology of Aging, 2003).
- 8. Researchers find their Nemo. With a fully sequenced genome, the zebrafish has gone from bit player to rising star in disease research and drug screening (King A. Cell, 2009).
- 9. The best scientist is open to experience and begins with romance- the idea that anything is possible (Ray Bradbury).
- 10. Failure is success if we learn from it (Malcolm Forbes).
- 11. Hope for the best, but prepare for the worst.