1. Mutations in the FBX07 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 FBX07 longer isoform (This thesis).

3. An intact N-terminus is required for the nuclear FBX07 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 FBX07 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)


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.