Stellingen behorende bij het proefschrift

Impact of afferent inputs on Purkinje cell spiking patterns and motor coordination

1. Disruption of the lateralization of the climbing fibers causes more profound impairment than having no cerebellar output at all. (this thesis)

2. Climbing fiber input drives reciprocity of Purkinje cell firing. (this thesis)

3. Ablation of PP2B results in loss of parallel fiber to Purkinje cell LTP and affect Purkinje cell intrinsic plasticity, which together cause profound motor learning deficits. (this thesis)

4. Lack of inhibitory input affects the temporal patterns of Purkinje cell simple spike firing, increasing spiking regularity. (this thesis)

5. The modulatory influence of climbing fiber on interneuron synapse could be crucial for introducing the timed suppression of simple spike firing during different motor tasks. (this thesis)

6. One should remember that experiments done in slice conditions, with blockage of synaptic input, do not necessarily reflect the behavior of the cell in vivo and can in fact produce patho-physiological results.

7. Thankfully, a mild phenotype can always be explained by compensatory mechanisms.

8. The best way to find a perfect VA floccular cell is not to look for it.

9. Science is a wonderful thing, if one does not have to earn one's living at it. (Albert Einstein)

10. I love deadlines; I like the whooshing sound they make as they fly by. (Douglas Adams)

11. Schrodinger's cat walks into a bar; and it doesn't.