Stellingen behorende bij het proefschrift:

**Saccade Planning and Execution by the Lateral and Medial Cerebellum**

1) Glissades are not an adaptable form of oculomotor behavior and do not contribute to getting the eye closer to the target. *(this thesis)*

2) Visual dentate nucleus neuron activity is rarely driven by one factor. Their response profile is highly heterogeneous and a single neuron can be modulated by visual, movement, and reward related stimuli. *(this thesis)*

3) Neurons in the lateral cerebellum can plan a saccade on color based visual information presented at the center of the visual field, but also on shaped based visual information presented peripherally. *(this thesis)*

4) Purkinje cell simple spike and complex spikes in the lateral cerebellum modulate in opposite phase for saccade direction, in the absence of movement error. *(this thesis)*

5) Visual dentate nucleus neurons are part of the D-zones of the cerebellum and thus are connected to the same circuit controlling higher visual functions. *(this thesis)*

6) The primate brain is one of the most intricate biological structures in existence and will probably continue to amaze us in ways we had not thought possible.

7) Doubt is clearly a value in science. It is important to doubt and that the doubt is not a fearful thing, but a thing of great value. - Richard P. Feynman

8) The fact that in primates the evolutionary expansion of the cerebral cortex happened in parallel with that of the cerebellum indicates that much remains to be learned about cerebro-cerebellar connectivity and function.

9) In behavioral neurosciences, a good task and training on that task are as essential as the scientific question.

10) Overall accessibility of publications and openly sharing methods, code, data, and techniques improves the quality of research.

11) By continually taking small steps, even the most colossal project eventually gets done.