Propositions accompanying the thesis

1. Individual differences in visuomotor adaptation rate and the electrophysiological response to error are related to motor noise. (this thesis)

2. Statistical power of upper extremity rehabilitation trials in the subacute phase after stroke can be increased by modeling stroke recovery with a mixture of exponential proportional recovery functions. (this thesis)

3. Mapping the cortical area of a single muscle using transcranial magnetic stimulation can be accelerated with pseudorandom stimulation and digital reconstruction. (this thesis)

4. Single-session cerebellar transcranial direct current stimulation enhances eyeblink conditioning in people with a genetic predisposition for slower learning, but has no effect on vestibulo-ocular reflex adaptation. (this thesis)

5. Long-lasting offline transcranial direct current stimulation does not improve motor skill learning of a tracing task in chronic stroke patients nor recovery of upper limb function in subacute stroke patients. (this thesis)

6. The common Val66Met polymorphism in brain-derived neurotrophic growth factor can both accelerate and decelerate motor learning depending on task specifics.

7. Eye-tracking based estimation of preferential attention for social stimuli in infarnts predicts the development of social skills in later life.

8. Cell-free DNA circulating in the bloodstream holds sensitive information about the pattern of neurodegeneration.

9. Cluster-based analysis of (longitudinal) clinical data can help uncover subgroups which are relevant for understanding disease pathophysiology and treatment individualization.

10. Individual differences in recovery after stroke can be partially explained by variations in genetic make-up.

11. Je n'invente rien, je redécouvre. (Auguste Rodin)