## **STELLINGEN**

behorende bij het proefschrift

## Childhood-onset movement disorders: mechanistic and therapeutic insights from *Drosophila melanogaster*

Depending on the question, *Drosophila melanogaster* may represent the golden mean between organisms too complex and organisms too simple to use as a model for neurological illness.

(This thesis)

Loss of active, 4-phosphopantetheinylated mitochondrial acyl carrier protein occurs upon disruption of Coenzyme A biosynthesis, which may underlie mitochondrial dysfunction in PKAN and CoPan.

(This thesis)

The detrimental effects of Coenzyme A deprivation in *Drosophila* are at least partially conferred by dysfunction of the pyruvate dehydrogenase complex, and amenable by stimulation of this complex.

(This thesis)

Loss of mitochondrial acyl carrier protein may, as an epiphenomenon, also underlie the iron accumulation observed in both PKAN and CoPan.

(This thesis)

- Loss of membrin, the *Drosophila* orthologue of GOSR2, in glial but not in neuronal cells leads to heat-induced seizure-like behaviour, suggesting that the primary function of GOSR2 disrupted in North Sea Progressive Myoclonus Epilepsy may be glial.

  (*This thesis*)
  - Integration of fundamental and clinical knowledge leads to better science and better medicine, better scientists and better doctors.
- Nature itself, unrestrained by medical ethics, has formulated an answer to many questions in genetics too cruel to venture the experiment.
- The moment we can no longer afford to apply advances in medicine to our patient care, our society has the choice between a financial and a moral bankruptcy.
- The diagnostic efficacy of the Single Item Narcissism Scale demonstrates the truth of Sir William Osler's adage "Listen to your patient, he is telling you the diagnosis".

  (Konrath et al., 2014; van der Linden & Rosenthal, 2016)
- Either we all live in a decent world, or nobody does.

  (George Orwell)