Propositions accompanying the dissertation:

Unraveling Molecular Mechanisms Underlying Alzheimer's disease and its Related Endophenotypes

1. The combined effects of common variants associated with Alzheimer's disease modify the high risk of Apolipoprotein E ε4 homozygote carriers. (This thesis)
2. Protein truncating mutations in the Sortilin Related Receptor 1 *(SORL1)* gene play a crucial role in the pathogenesis of Alzheimer's disease. (This thesis)
3. The mutation p.P522R in the Phospholipase C Gamma 2 (*PLCG2*) gene protects against Alzheimer's disease and implicates innate immunity in the pathophysiology of the disease. (This thesis)
4. Between 30 and 40% of the heritability of brain lobar volumes can be explained by common genetic variation. (This thesis)
5. Docosahexaenoic acid (DHA) and free cholesterols in high density cholesterol (HDL) determine cognitive function. (This thesis)
6. Replication in metabolomics is a crucial step that needs to become standard practice.
7. Genetics is to biology what atomic theory is to physics -- *John Stephen Jones.*
8. In recent decades rapid technological advances are the drivers of scientific discoveries.
9. Genetic studies play a key role in determining causality.
10. The genetics of the brain is complex enough to crack our brains for decades to come.
11. "Being significantly wise does not imply you are genome-wise significant".

Sven J. van der Lee, Rotterdam, 13 October 2017