Stellingen behorende bij het proefschrift

**Genetic and metabolic studies of aging, depression and sleep in the general population**

1. Family-based studies and genetic isolates are valuable for studying rare genetic variants. *(This thesis)*

2. The ATM gene, fatty acids and homocysteine metabolism play a role in telomere length. *(This thesis)*

3. Antidepressant medication, body mass index and smoking have a major effect on the circulating metabolome. *(This thesis)*

4. RBFOX3 is associated with sleep latency and may be involved in other sleep outcomes. *(This thesis)*

5. The finding that lower hippurate levels increases the risk of depression asks for further evaluation in clinical trials. *(This thesis)*

6. Telomere length in whole blood is a proxy for tissue-specific telomere length for many tissues, supporting the use of blood telomere length as a proxy for telomere length in disease-specific tissues in large epidemiological studies. *(After: Demanelis et al., Science, 2020)*

7. Future large-scale trans-ethnic meta-analyses will be critical in determining shared causal variants from population-specific rare variants. *(Li et al., Am J Hum Genet, 2020)*

8. The emphasis in research will need to shift from gene discovery to translation into biological understanding and patient-focused outcomes, such as better diagnostic tests and novel treatments. *(Visscher et al., Am J Hum Genet, 2017)*

9. Psychosocial components are as important as biological components in healthy aging. *(Lu, Pikhart, Sacker, The Gerontologist, 2019)*

10. It is important to continue researching different nutritional approaches to fight physiological damages that are produced in an organism by aging. *(Sanchez-Morate et al., Biomedicines, 2020)*

11. We are all going to age and die, that's not going to change. But we have a surprising control of how that happens. *(Elizabeth Blackburn)*

*Ashley van der Spek, oktober 2021*