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*)

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