PROPOSITIONS

1) Homocysteine levels associate with limited site-specific changes in genome-wide DNA methylation of blood leukocytes. (this thesis)

2) Folate and vitamin B12 measurements in blood are needed to validate the observed dietary effects on genome-wide DNA methylation. (this thesis)

3) Cigarette smoking shows a wide and long lasting impact on site-specific DNA methylation of blood leukocytes. (this thesis)

4) Biological databases, require up-front and extensive data cleaning and statistical analysis to get accurate and reproducible findings from big data. (this thesis)

5) The houseman method is insufficient for correction of cell-type heterogeneity in DNA methylation measurements. (this thesis)

6) Timing and pattern of exercise can enhance the effect of diet, to optimize the notion “you are what you eat”. (Luc van Loon)

7) The idea that methylation patterns could be an aging clock presents an opportunity and a challenge for anti-aging medicine. (Josh Mitteldorf)

8) Prevention of chronic diseases requires, besides behavioral changes, also investments in education, food policies, and urban infrastructure. (Willett WC et al, 2006)

9) We are wrecking the oceans because of our addiction to cheap, plastic products and packaging, and a comprehensive global failure to steward these materials properly. (Matt Prindiville)

10) Optimism, smiles and a positive perception of aging increases longevity. (Giltay EJ et al, 2004; Peterson C, 2010; Levy BR et al, 2002)

11) A hidden connection is stronger than an obvious one. (Heraclitus of Ephesus (535-475 BC))