Stellingen behorende bij het proefschrift

The Immune System Out of Shape?

Shaping of adaptive immunity by persistent viral infections in young children

- 1. Understanding the highly dynamic development of our delicately balanced immune system will be essential for unraveling the processes underlying long-lasting immunity. (this thesis)
- 2. Breastfed infants carry increased numbers of CD8⁺ central memory T cells, potentially contributing together with maternal IgA to the protective effect of breast milk against infectious diseases in infancy. (this thesis)
- 3. EBV infection in the first year of life is associated with a transient decline of memory B cells which normalizes before 6 years of age and does not seem to affect vaccination responses. (this thesis)
- 4. CMV- and EBV-related T-cell expansions in young children do not impair naive T-cell numbers nor maintenance of protective responses against non-related pathogens. (this thesis)
- 5. Current cART is changing HIV from a lethal into a chronic disease, thereby allowing infected children to reach adulthood. However, several subclinical immune abnormalities persist and therefore warrant long-term follow-up of HIV-infected children to prevent clinical complications. (this thesis)
- 6. The immune system provides the perfect illustration that a collaboration in which personal gain is subordinate to the overall benefit of the host, is the only way to provide long-lasting survival without eventually losing control.
- 7. In further unraveling the complex network of communication within the immune system, the presence and functional properties of extracellular vesicles should now be considered and paradigms should be redefined. (adapted from M. Yáñez-Mó et al. J Extracell Vesicles 2015; 4:27066)
- 8. Transcription regulatory elements controlling hematopoiesis might become important therapeutic targets for treatment of hematological disorders. (adapted from the thesis of dr. A. van den Heuvel, 2015)
- 9. The dogma in the field of cognitive abilities that twins are at an intellectual disadvantage compared with singletons is implied rather than observed. (adapted from D. Posthuma et al. Twin Research 2000; 3:83–87)
- 10. Though it is important to always reach for perfection, one should find a point of satisfaction. If perfection is the only acceptable goal, it will eventually hinder you from moving forward.
- 11. Your life is like a butterfly: without it the world might function exactly the same, but would be less beautiful.