

STELLINGEN behorende bij het proefschrift  
PROPOSITIONS associated with the thesis

**INFLAMMATORY ASPECTS OF TYPE 2 DIABETES IN THE ANDEAN REGION**

1. There is a high prevalence of obesity, dyslipidemia and raised serum levels of IL-6 and CCL4 in the Quito non-diabetic general population as compared to the Rotterdam non-diabetic general population.

*This thesis*

2. Circulating monocytes of Quito T2D patients with high blood lipid values show an over expression of microRNA's and genes involved in the adhesion of the cells, the shape change and differentiation of the cells. These circulating cells show a dampened inflammatory state, i.e. reduced expression of a set of pro-inflammatory genes .

*This thesis*

3. Circulating monocytes of Quito T2D patients with normal blood lipid values show over expression of pro-inflammatory genes.

*This thesis*

4. MiR-146a is a serum biomarker of the inflammatory process linked to the failure of glucose control of the T2D state in Quito patients.

*This thesis*

5. The serum and monocytes of Quito patients with T2D show clear signs of vascular repair, i.e. an increase of serum and a higher gene expression of HGF respectively.

*This thesis*

6. Macrophages can carry an 'epigenomic memory' of prior exposure to IL-4 (as an indicator of parasitic infection), such that there will be a more limited response to IFN- $\gamma$  during a bacterial infection.

*Netea, et al; Nature Immunology; Innate Immune Memory Meeting 2015*

7. The parallels between homeostatic and inflammatory signals suggest the evolutionary origin of inflammation as a control system that complements the homeostatic control when the latter is insufficient.

*Kotas, et al; Cell 2015*

8. MiRNA coupling with transcription factors is implicated in myeloid-based development of dendritic cells, monocytes and granulocytes, as well as function as mature cells and contributors to host defense and inflammation.

*Gazzar, et al; Immunology and Cell Biology 2012*

9. Autoinflammatory diseases are mostly driven by inflammasome-induced IL-1 $\beta$  and IL-18 production, (systemic) autoimmune diseases are associated with type I interferon signatures in blood.

*van Kempen, et al; Nature Reviews Rheumatology 2015*

10. The innate immune system has memory, this will lead to a paradigm shift away from the view that it is simply an immediate mediator of host resistance and inflammation.

*Innate Immune Memory Meeting 2015*

11. Science has great beauty. A scientist in his laboratory is not only a technician: he is also a child placed before natural phenomena which impress him like a fairy tale.

*Marie Curie*

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