

Stellingen behorende bij het proefschrift:
Propositions associated with the thesis:

Regulation of Human Mast Cell Activation

1. Health benefits of short-chain fatty acids in allergic disease can, at least in part, be explained by epigenetic suppression of mast cell activation (this thesis).
2. Butyrate triggers selective depletion of histone acetylation near transcription start sites and super-enhancer regions of highly expressed mast cell activation genes (this thesis).
3. Children with an early-life dysfunctional microbiome - defined by a poor ability to efficiently degrade complex carbohydrates - are likely to develop atopy later on in life (this thesis).
4. Following stimulation, mast cells rapidly upregulate negative regulators of cell activation and signal transduction (this thesis).
5. The combination of gene editing and high-resolution confocal microscopy enable the identification of proteins involved in human mast cell degranulation (this thesis).
6. Fetal mast cells primed with maternal Immunoglobulin E mediate postnatal allergic responses upon the first allergen exposure (Msallam et al., Science 2020).
7. The microbial population of skin surface and dermis regulates mast cell maturation, function and the development of mast cell tumors (Zamarian et al., Scientific Reports 2020).
8. Chronic overnutrition, as a result of excessive consumption of fats and sugars, triggers erroneous immune activation that can be linked to leading health problems in Westernized nations (Christ et al., Immunity 2019).
9. Longitudinal multi-omics profiling of individuals can lead to actionable health discoveries and provide relevant information for precision health (Rose et al. Nature Medicine 2019).
10. The EAT-Lancet diet, a global meal plan that can feed 2050's estimated world population of 10 billion people, is both healthy and environmentally sustainable (Willett et al., Lancet 2019).
11. Nature does not need our protection; it needs our absence (Dr. John Hammond).