*Stellingen behorende bij het proefschrift*

# Immunity Unchained

***Improving Cancer Immunotherapy***
***by targeting the Tumor Macro-Environment***

1. Anti-PD-L1 mediated anti-tumor immunity depends in part on abrogating PD-1/PD-L1 interactions in tumor-draining lymph nodes *(this thesis)*.

2. Gemcitabine reduces myeloid-derived suppressor cell frequencies and regulatory T-cell proliferation but increases T- and NK-cell activation in peripheral blood of mesothelioma patients *(this thesis)*.

3. Although cancer vaccines are effective in a subgroup of solid cancer patients, efficacy is enhanced in preclinical models by depletion or repolarization of macrophages *(this thesis)*.

4. Preventing excessive and chronic T-cell activation by inhibiting intracellular JAK3-signaling improves anti-tumor T-cell immunity *(this thesis)*.

5. The concept of a tumor macroenvironment better describes our systemic immune response to cancer and yields improved mechanistic insight into why some patients benefit from immunotherapy and others do not *(this thesis)*.

6. Following the use of immunotherapy, the word ‘cure’ has now become part of the oncologist’s vocabulary *(Lesterhuis et al. Nature Reviews Drug Discovery 2017)*.

7. Many immunotherapy trials currently outpace our understanding of the biological mechanisms involved *(adapted from De Visser et al. Nature Reviews Immunology 2020)*.

8. Physician-scientists are critical members of the biomedical workforce as they are uniquely placed to identify and prioritize the most pertinent clinical questions *(adapted from Noble et al. Nature Cancer 2020)*.

9. Just in so far as the knowledge of physiology is sound will the practice of the physician be likely to be proficient *(J.J.R. Macleod, Science 1914)*.

10. Only with knowledge can one innovate *(Michel Troisgros, chef of >50-year three Michelin-star family restaurant Troisgros, Chef’s Table: France, Episode 4)*.

11. Vissi d’arte, vissi d’amore *(I lived for art, I lived for love, Act 2, Tosca, Giacomo Puccini)*.