Stellingen behorende bij het proefschrift:

Skeletal Muscle Wasting:

Clinical implications and experimental treatment

- 1. Preoperative low skeletal muscle mass is associated with a reduction in overall survival in oncology patients and liver transplant candidates. (this thesis)
- 2. Progressive skeletal muscle loss during neoadjuvant chemoradiotherapy for rectal cancer may suggest occult metastatic disease. (this thesis)
- 3. The flavonoid quercetin limits cachexia-associated muscle wasting in experimental cachexia. (this thesis)
- 4. Activin-Like Kinase 4 and 5 receptor inhibition limits muscle wasting in experimental cachexia via expression of modulation of cachexia associated ubiquitin ligases. (this thesis)
- 5. Skeletal muscle mass can be assessed in laboratory animals via micro-CT, allowing for a reduction in laboratory animal usage in sarcopenia / cachexia research and adhering to the principles of the 3Rs (Replacement, Reduction and Refinement). (this thesis)
- 6. Cancer cachexia is not merely a complication of tumor progression, as cancer cells induce and exploit systemic functions. It would be reductive to consider cachexia as solely caused by tumor metabolism acting as energy sink, as evidences by the fact that tumor mass hardly corresponds to the severity of cachexia. (Porporato, Oncogenesis 2016)
- 7. Everyone might benefit if the most radical protagonists of evidence based medicine organised and participated in a double blind, randomised, placebo controlled, crossover trial of the parachute. (Smith et al., BMJ 2003)
- 8. Burnout and career choice regret is highly prevalent amongst resident physicians. (Dyrbye et al., JAMA 2018)
- 9. By incorporating AI and ML to intelligently aggregate quantitative, diagnostic information, some of which is otherwise not detectable by humans, radiologists have the potential to play a central role in personalized, precision medicine. Radiology will be the foundation of precision health care. (Dreyer et al., Radiology 2017)
- 10. It does not matter how slowly you go as long as you do not stop. (Confucius)
- 11. To be yourself in a world that is constantly trying to make you something else is the greatest accomplishment. (Emerson)

Stef Levolger

Rotterdam, 12 november 2019