## **Propositions**

- Hepatitis B-related HCC affects individuals in South America at a younger age than other causes of liver disease, but there is an incomplete understanding of the factors implicated in this process (this thesis)
- 2) Infection by HCV contributes to the progression to liver cancer before the development of cirrhosis by early modulation of cancer-related genes (this thesis)
- 3) Measurement of the immune response from the body towards HCC can be utilized as a screening tool for HCC prediction before the tumor is visible by surveillance imaging (this thesis)
- 4) Response to HCC systemic therapy specific to sorafenib does not seem to depend on underlying liver disease in cohorts from South America and Africa (this thesis)
- 5) There is a lack of awareness regarding viral hepatitis as a risk factor for HCC in resource-limited regions, and novel approaches to increase awareness and screening are needed (this thesis)
- 6) The mechanisms involved in cirrhotic vs non-cirrhotic NAFLD-related liver cancer differ mainly based on inflammatory paths (van Meer S, Eur J Gastroenterol Hepatol 2016; Ma C, Nature 2016)
- The advent of new immunotherapies and targeted therapies for HCC will individualize treatment of HCC based on specific factors including underlying liver disease (Greten et al, Gastroenterol 2019)
- 8) The detection of exosomes or circulating tumor DNA which present specific information of a tumor detectable in blood has changed the approach to tumor evaluation and will undoubtedly change the approach to tumor diagnosis (Chen X, Nature Comm 2020)
- 9) Environmental variables can induce genetic changes that impact the development of HBV-related HCC (Zhang W, Gastroenterol 2017, Gursoy-Yuzugullu O, Liv Int 2011)
- 10) One of the biggest mistakes is to underestimate the power of human stupidity as it is one of the major forces driving change in the world (Yuval Noah Harari)
- 11)In the practice of medicine, you can change the life of the person in front of you, in the practice of science you can change the lives of those in front of you, of those that you don't know and of those who yet don't exist (JD)