1. To predict UM patient outcome and stratify patients for therapeutic options, a targeted sequencing technique to determine DNA sequences and copy number variations is sufficient. - This thesis

2. Aberrantly expressed microRNAs putatively promote metastatic spreading to distant organs by deregulating EGF and EIF2 signaling and cell cycle regulation - This thesis

3. Both primary and metastatic UM specimens display a recognizable aberrant methylation pattern, indicating that targeting the methylation status might strike the Achilles heel of UM - This thesis

4. Extraction of melanocyte exosomes from UM patients’ plasma samples could provide us with a highly specific non-invasive biomarker for metastatic UM - This thesis

5. A combinatorial treatment approach in which local treatment of the primary tumor combined with systemic treatment targeting the micro-metastases in high-risk cases will have the most potential in UM therapeutics - This thesis

6. With the advent of NGS-based diagnostics, the traditional ‘one-size-fits-all’ approach will be replaced by patient-specific therapies.

7. If dissemination begins before the tumor has become symptomatic, only efforts aimed at helping the body cope with the already disseminated tumor cells will improve survival – Zimmerman and McLean, 1984

8. We can’t any longer have the conventional understanding of genetics, because it is increasingly obvious that epigenetics – actually things which influence the gene’s function- are much more important than we realized. – Robert Winston, 2008

9. Running and research have so many things in common. For both, it takes a long time before you can see the outcomes – Shinya Yamanaka, 2018

10. I have not failed. I have just found 10.000 ways that won’t work - Thomas Edison

11. For most of history, anonymous was a woman – Virginia Woolf, 1929