Propositions of this thesis:

MicroRNAs - micro molecules with macro clinical & molecular implications

1. The rarity and the complex biology of soft tissue sarcomas make their treatment extremely challenging. (This Thesis)

2. Molecular characterization of soft tissue sarcomas using tumor profiling is essential to understand their biology for the development of effective treatment. (This thesis)

3. Etiology and tumor biology of NF-1 associated malignant peripheral nerve sheath tumors (MPNST) differ from the sporadic ones as shown by their distinct miRNAs' expression profile. (This thesis)

4. Modulating the expression of de-regulated miRNAs might have significant influence on imatinib resistant gastrointestinal stromal tumor (GIST) patients. (This Thesis)

5. As the two commonly used malignant peripheral nerve sheath tumors (MPNST) cell lines, T265 and ST88-14, share the same DNA fingerprint, they should no longer be viewed as distinct cell lines. (This Thesis)

6. Statistical significances do not always address the questions as cancer is a biological, not a statistical problem.

7. The purpose behind research and therapeutic findings in healthcare is not supposed to be for profitable business nor should it be for the sake of name & fame.

8. Since the number of tumor models is globally steadily increasing a database with standardized reports to organize, store, and share model data is required. (*Galuschka, et al.,* Cancer Research, 2017)

9. General treatment protocols do not address the genomic diversities between patients and these differences are often neglected in (pre)clinical investigations.

10. Induced pluripotent stem cells are potential tools for developing novel pre-clinical models for cancer.

11. "Nothing is impossible, even the word itself says 'I'm possible'!" -Audrey Hepburn