Propositions accompanying the thesis:

**miR-9/9* in myeloid development and acute myeloid leukemia**

1. MiR-9/9* interfere with normal neutrophil differentiation by downregulation of ERG (*this thesis*).
2. While high expression of miR-9 in AML has no apparent clinical prognostic impact, high expression of miR-9* predicts improved patient survival independently of other established prognostic factors (*this thesis*).
3. In *MLL*-rearranged AML, miR-9 enhances MLL-AF9-mediated cell transformation, whereas miR-9* potentially targets AF9 (*this thesis*).
4. The functional contribution of a corresponding miRNA* should always be taken into account when studying the biological effects of a particular miRNA (*this thesis*).
5. The functional versatility of miR-9/9* within a certain malignancy highlights the importance of studying the function of miRNA's in their relevant cellular context (*this thesis*).
6. MiRNAs enhance the robustness of gene regulation in mammalian genomes by creating multi-node feedback and feedforward loops with transcription factors (*based on J. Tsang, Mol Cell, 2007*).
7. The capacity of an oncogene to initiate tumor formation does not predict its impact on the metastatic potential of tumor cells (*based on R.A. White, J Clin Invest, 2013*).
8. The unstable identity of differentiating hematopoietic cells allows them to change their fate and switch between lymphoid and myeloid lineages (*according T. Graf, Blood, 2002*).
9. Even when scientific hypotheses are based on apparently simple ideas, the experiments to test them may be complex.
10. "We shall not cease from exploration, and the end of all our exploring will be to arrive where we started and know the place for the first time" (*T.S. Eliot, "Little Gidding"*).

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