Exploring Grainyhead-like 2 target genes in breast cancer

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Stellingen

Behorende bij het proefschrift

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1. GRHL family members have important roles in human cancer (this thesis).

2. Acting as either an oncogene or tumor suppressor gene, GRHL2 represents a double-edged sword in cancer development.

3. Based on current scientific literature, GRHL2 serves as a tumor suppressor in most cancers where EMT is a predominant driver of tumor progression.

4. The fact that GRHL2 expression is associated with better survival in sarcomas (Hish et al, 2016, Mol Cell Biol) may point to different roles in epithelial and mesenchymal-derived cancers.

5. The target profile and biological function of GRHL2 is determined by the subtype of breast cancer (this thesis).

6. Genome-wide identification of binding sites of GRHL2 reveals overlap and differences between luminal-like and basal A subtypes of breast cancer (this thesis).

7. By analyzing synthesis of nascent RNAs, Bru-seq reveals changes in transcription and is not affected by post-transcriptional regulation (Paulsen et al, 2014, Methods).

8. Integration of Bru-seq and ChIP-seq data provides a strategy to reveal direct targets of transcription factors (this thesis).

9. Global sequencing is like a global map in the travelers' hands, which may provide researchers with directions regarding understanding genetic diseases.

10. Discovery of a novel and effective target is similar to, among hundreds of suits, finding out your favorite one, which is worthwhile in spite of being time consuming and a heavy workload.