Stellingen

Behorende bij het proefschrift;

Transcription Factor Networks in Embryonic and Neural Stem Cells

1. FLAG-affinity purification is an efficient method to identify interactions between transcription factors and their co-regulators. *(this thesis)*

2. The transcription factor Sox2 and chromatin remodelling enzyme Chd7 physically interact and co-localize on the genome in neural stem cells. *(this thesis)*

3. Sox2 and Chd7 cooperate in the regulation of genes that are involved in distinct human syndromes. *(this thesis)*

4. Chromatin immunoprecipitation of specific histone modifications combined with mass spectrometry (ChIP-MS) is an effective method to identify proteins associated with regulatory regions. *(this thesis)*

5. ChIP-MS can identify factors associated with enhancers that are important for cell identity. *(this thesis)*

6. Interestingly, even using the most conservative estimates, the fraction of bases likely to be involved in direct gene regulation, even though incomplete, is significantly higher than that ascribed to protein-coding exons, raising the possibility that more information in the human genome may be important for gene regulation than for biochemical function. (*The ENCODE Project Consortium, Nature 2012*)

7. Enhancers are the most dynamically utilized part of the human genome, with the 'junk DNA' of one cell type being the treasure of another cell type. (*Buecker & Wysocka, Trends in Genetics 2012*)

8. "Just as Wall Street needs to break the hold of bonus culture, so science must break the tyranny of the luxury journals." (*Randy W. Schekman, The Guardian 2013*)

9. Sondern diese wirkliche Welt der Erkennbarkeit, in der wir sind und die in uns ist, bleibt, wie der Stoff, so auch die Gränze unserer Betrachtung: sie, die so gehaltreich ist, daß auch die tiefste Forschung, deren der menschliche Geist fähig wäre, sie nicht erschöpfen könnte. (*Arthur Schopenhauer, Die Welt als Wille und Vorstellung, zweiter Band 1844*)

10. "When you dance, your purpose is not to get to a certain place on the floor. It's to enjoy each step along the way." (*Wayne Dyer*)

11. "I now walk into the wild." (*Christopher McCandless, postcard to Wayne Westerberg 1992*)