

# Stellingen

*behorende bij het proefschrift:*

## Transcription Factors, Chromatin Loops & Blood Cells

1. Repressors preventing premature gene activation by activators already bound at regulatory elements poises genes for rapid activation upon the appropriate developmental cue. (*This thesis*)
2. Unbiased 3C-based approaches such as 3C/4C-Seq should be a standard tool to link non-coding regulatory GWAS hits to candidate target genes. (*This thesis & Gorkin, D.U. and Ren, B. Nature 2014-507:309-310*)
3. Enhancer modulation may become a viable therapeutic strategy, especially if the new genome targeting/editing techniques can be optimized to clinical standards. (*This thesis & Bauer, D.E. et al. Science 2013-342:253-257*)
4. A virtually complete depletion of CTCF has a surprisingly subtle effect on complex genome architectures such as a contracted immunoglobulin kappa light chain locus. (*This thesis*)
5. Modulating of pre-existing enhancer-mediated chromatin interactions ('enhancer focusing') could represent a more commonly used gene regulatory mechanism. (*This thesis*)
6. Although it remains an open question whether the recently defined 'super-enhancers' share any specialized functional properties, their remarkable sensitivity to BET bromodomain inhibitors holds great therapeutic promise. (*Shi, J. and Vakoc, C.R. Mol Cell 2014-54:728-736*)
7. The definition of 'function' used by the ENCODE consortium ("*These data enabled us to assign biochemical functions for 80% of the genome...*") is a very clumsy one. (*Graur, D. et al. Genome Biol Evol 2013-5:578-590 & Doolittle, W.F. PNAS 2013-110: 5294-5300*)
8. "It's never too late to screw up an experiment." - *Wise words by Robert-Jan Palstra*
9. "Never postpone disappointment." - *Good but tough advice from Frank Grosveld*
10. Young and promising French junior PIs can be easily recognized by their love for corny 'Belgian' dance music.
11. A hen is only an egg's way of making another egg. - *Samuel Butler, English novelist (1835-1902)*

