Propositions/Stellingen

1. Kis-L physically associates with BAP and PBAP chromatin remodeling complexes to fine-tune gene expression. (This thesis)

2. PRC1 represses transcription by blocking recruitment of Mediator and RNA Pol II to promoter and enhancer elements. (This thesis)

3. The 19S proteasome binds chromatin in an RNA-dependent manner. (This thesis)

4. *Drosophila* BRD4 physically interacts with the Mediator complex and both factors colocalize on chromatin in a genome-wide fashion. (This thesis)

5. The ISWI ATPase is part of at least four distinct chromatin remodeling complexes in *Drosophila*. (This thesis)

6. Trr, the *Drosophila* homolog of the mammalian Mll3/4 COMPASS-like complexes, can function as a major H3K4 monomethyltransferase on enhancers *in vivo*. (Herz et al., Genes Dev. 2012. 26(23):2604-2620)

7. Transcription factor Nrf1/TCF11 is a key regulator of a transcriptional feedback loop promoting the synthesis of new proteasome subunits upon interference with proteasome activity. (Radhakrishnan et al., Mol Cell. 2010. 38(1):17-28; Steffen et al., Mol Cell. 2010. 40(1):147-158)

8. Co-translational formation of protein complexes is a widespread phenomenon. (Duncan & Mata, PLoS Genet. 2011. 7(12):e1002398)

9. RNA polymerase subunits Rpb4 and Rpb7 link transcription and mRNA decay to translation. (Harel-Sharvit et al., Cell. 2010. 143(4):552-563)

10. "Science never solves a problem without creating ten more" (George Bernard Shaw, writer)

11. "If it's big, it must be important" (Robert Tjian, Professor of Biochemistry, UC Berkeley)