

## ***Stellingen***

Behorend bij het proefschrift:

### **Differential Pathway Control in Nucleotide Excision Repair**

1. Cells under mild genotoxic stress prioritize repair of transcriptionally active genes. (this thesis)
2. Fluorescence recovery after photobleaching currently is the only tool to quantitatively study the response of NER factors to a low damage load. (this thesis)
3. SUMOylation and subsequent RNF111 mediated ubiquitylation of XPC is needed for efficient dissociation of this factor and ensures efficient progression of the NER reaction. (this thesis)
4. The actions and live span of proteins are tightly regulated by PTMs and this regulation is vital in all cellular processes. (this thesis)
5. Monte Carlo simulation of biological systems not only provides tools to answer important questions, but also may add to understanding which questions are important to ask. (this thesis)
6. "The international symbol of biological life should not be a double helix, but a double feedback loop." - J. Davies
7. With the revolution in super-resolution technology, microscopy will become even more important in biological research and with this Doubting Thomas is going to be proven (even more) right: Seeing is believing.
8. The complexity of the eukaryote cell exceeds that of the human brain.
9. Without adequate funding for innovative fundamental research there will be nothing for translational researchers to translate.
10. The Dutch grading system ("a 9 is for the teacher, a 10 is for our dear Lord") is unexplainable in other countries and should be overhauled to give equal opportunities abroad.
11. "Science is a good thing. News reporters are good things too. But it's never a good idea to put them in the same room." - Scott Adams.