

Propositions belonging to the thesis

## **Nucleotide excision repair through the looking glass**

1. SWI/SNF complexes promote the expression of TFIID subunit GTF2H1, which is required for the stability and functionality of the TFIID complex in transcription and NER. *This thesis (Chapter 2)*
2. There is an exciting and unexplored potential of exploiting SWI/SNF-induced DDR vulnerabilities for new cancer therapy strategies. *This thesis (Chapter 2 and 5)*
3. Cooperative and competitive interactions between DNA damage detection and verification promote correct spatiotemporal damage handover during GG-NER. *This thesis (Chapter 3)*
4. UV-induced and ubiquitylation-mediated DDB2 degradation functions as a prophylactic mechanism of excessive DDB2 activity. *This thesis (Chapter 3)*
5. CHD1, a novel ATP-dependent chromatin remodeler that promotes NER, facilitates late NER steps during the UV-DDR. *This thesis (Chapter 4)*
6. For the benefit of the underrepresented, we must embrace open science and refrain from using journal names as proxies for the quality of the research itself.
7. The repurposing of SU-3327 as halicin via machine learning analysis is a benchmark for future drug research. *Stokes, J. M. et al. Cell, 2020*
8. Encoded survival mechanism in non-coding intron DNA mediates cell survival to starvation by suppressing ribosome production to preserve energy. *Parenteau, J. et al. Nature, 2019; Morgan, J. T., Fink, G. R. & Bartel, D. P. Nature, 2019*
9. Distorted literature: when privileging statistical significance causes one to dismiss genuine effects.
10. The casualization of academic contracts is bad for science and incompatible with social life. Scientific discoveries would increase if scientists would be able to make long-term plans.
11. Cultivated ignorance is the biggest pandemic of our times.