

Propositions belonging to the thesis

MicroRNAs, the DNA damage response and cancer

1. Although the biological outcome is highly similar for distinct epithelial cells, the cellular origin is a major determinant in the microRNA response to DNA damage.
This thesis, chapter 2
2. MicroRNA-processing, RNA-binding proteins both stimulate and inhibit UV-induced microRNA maturation.
This thesis, chapter 3
3. MicroRNA Let-7 plays a role in both DNA damage-induced ageing and cancer.
This thesis, chapter 5
4. MicroRNA-24 differentially regulates MDC1 isoforms through MicroRNA Responsive Elements within the Open Reading Frame of one isoform.
This thesis, chapter 4
5. MicroRNAs that differentially regulate isoforms do not only influence gene levels, but can also control gene function.
This thesis, chapter 4
6. Half of all MicroRNA Responsive Elements are localized in Open Reading Frames which further increases the regulatory potential of microRNAs.
Hafner M et al, Cell, 2010
7. Since the discovery of non-protein coding genes the concept of a gene has become less well defined.
8. Not the number of protein-coding genes, but the number of non-coding transcripts discriminate between less and more complex multi-cellular organisms.
Taft, R.J., M. Pheasant, and J.S. Mattick, Bioessays, 2007
9. Life is a spectacular out-of-control, auto-catalytic chemical reaction.
10. It is no surprise that many clinical tests with psychotherapeutic drugs turn sour when they are tested in the proper scientific setting; in clean, white hospital rooms, away from trees, flowers, the wind and beautiful music.
Paraphrased from Alexander Shulgin (†2014), organic chemist, godfather of psychedelics, experimenting many compounds on himself
11. Dancing is a perpendicular expression of a horizontal desire.
Anonymous, Robert Frost, George Bernard Shaw

Maikel D. Wouters, 2014

