Stellingen behorende bij het proefschrift

Cockayne syndrome B protein: connection between repair, transcription and chromatin structure

1. CSB is a chromatin remodeling factor (this thesis).

2. Defective transcription-coupled repair is not the only cause of Cockayne syndrome. *(Le Page et al., 2000, Cell: 101, 159-171)*

3. The second important reason for the TCR pathway in mammals is to eliminate genotoxic events that can irreversibly trigger apoptosis. *(Hanawalt and Spivak, in Advances in DNA damage and repair, Plenum Publishers, New York, 1999; Ljungman et al., 1996, Oncogene: Vol 13, 823-831)*

4. The multiple involvement of NER factors in TC-base excision repair (TC-BER) opens the possibility for a general TC-repair mechanism. (*Le Page et al., 2000, Cell: 101, 159-17; Cooper et al., 1997; Science 275, 990-993)*

5. The apparent high dynamics of nuclear proteins and of sub-nuclear compartments in living cells supports a stochastic mode for protein-protein interactions. This suggests that some of these compartments are a consequence of underlying functional events, rather than pre-existing structures. *(Houtsmuller et al., 1999, Science, Vol 284, 958-961; Phair and Misteli, 2000, Nature, Vol. 404, 604-609; McNally et al., 2000, Science: 287 1262-1265; Misteli et al., 1997, Nature 378, 523-526; Singer and Green, 1997, Cell, Vol 91, 291-294)*

6. Correlating the increase of ERCC1 mRNA levels with clinical resistance to cisplatin is misleading, given the documented post-translational regulation that controls ERCC1 protein levels. *(Li et al., 1998, JBC: 273, 23419-23425 and references therein; Sijbers et al., 1996, NAR: 24, 3370-3380)*

7. The observation that loss-of-function mutations of the hSWI/SNF subunit hSNF5 contribute to human cancer emphasizes the crucial but still undefined role of chromatin remodeling factors *in vivo. (Versteege et al., 1998, Nature: 394, 203-206; Sevenet et al., 1999, Am. J. Hum. Genet.:65, 1342-1348; Sevenet et al., 1999, Hum. Mol. Genet.:8, 2359-2368)*

8. What is it that is not a poison? All things are poisonous and nothing is poisonous. Only the dose determines that a thing is not a poison. *(Paracelsus)*

9. Lighting up the nucleus of living cells with GFP-labeled proteins not only satisfies our scientific but also our aesthetic needs.

10. A multiethnic society is not achieved by diminishing the cultural differences between individuals but by increasing the interest in these differences.

11. Too much economic and social welfare diminishes the interest of common people in politics.

12. The fascination of the unexplored is stronger than the torment of scientific disappointments.

13. Some degree of disorganization increases the chance of unexpected findings.

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