Immune evasion by varicelloviruses : the identification of a new family of TAP-inhibiting proteins

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Stellingen

behorend bij het proefschrift

"Immune evasion by varicelloviruses:
the identification of a new family of TAP-inhibiting proteins"

1. The ability of BHV-1-encoded proteins to mediate the shutoff of MHC class I protein synthesis and to inhibit peptide transport by TAP, shows once more that BHV-1 like most herpesviruses does not concentrate on a single immuno-evasion strategy but rather utilizes several strategies in parallel. *This thesis.*
2. The notion that, at a cellular level, a human is not much different from a cow has led to the discovery of a new TAP inhibitor. *This thesis.*
3. Although GFP-tagging of proteins can aid in identifying new protein-protein interactions, it can on the other hand, obscure the outcome of these interactions. *This thesis.*
4. BHV-1 UL49.5 is a resourceful protein that possesses a dual function during viral infection, but also exhibits dual action in relation to TAP inhibition. *This thesis.*
5. If the BHV-1 UL49.5 protein would be expressed only at the late phase of the viral replication cycle, the chance of its association with TAP would be very small. *This thesis.*
6. Diversity of mechanisms employed by UL49.5 homologs (encoded by BHV-1, PRV and EHV-1) to block human TAP may not be that diverse if studies could be performed using natural host cells. *This thesis.*
7. After decades of research it is still unknown how important the role is of herpesvirus proteins that target the MHC class I antigen presentation pathway in the context of a natural infection.
8. Given the importance of local CD8 responses, the intraperitoneal application of MCMV to laboratory mice, makes from this potentially "natural" host an unnatural system. Gold MC, et al. 2004 *The Journal of Immunology 172:6944-6953.*
9. The role that BHV1-encoded TAP-inhibiting protein plays in the context of natural infection may have already been revealed in the past. *Liang X, et al. 1997 Vaccine 15:1057-1064*
10. If we could identify and understand every step of viruses' life cycles, we would get closer to understanding how our cells function.
11. To be a successful PhD student, one can learn a lot from herpesviruses; to co-evolve (with the topic); to adapt to one's host (promoter); to co-exist (with competition) and to persist (to finish the thesis). The path that a PhD student should not follow is to go into latency!
12. The answer is sometimes there before the question. Only by asking the right question one can recognize the answer.
13. There is a thin line between "a desperate housewife" and "a desperate researcher".
14. If politics would have its fingers less involved in science, the research on fundamental biological processes would advance much faster.

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