

Chapter 8.6

Concluding remarks Section 8

Our and others' research strongly suggest that DCs have an important role in the pathogenesis of viruses. DCs are crucial for mediating adaptive immune responses and viral clearance. However, their function may be subverted by viruses for viral transmission and immune escape. Further research is necessary to unravel the role of DCs in viral pathology, to elucidate the role of DCs in the immune system, and to design novel vaccination strategies and microbicides. Understanding HIV-1 transmission serves a major interest for the human population. A lot of money and effort are put into research on HIV-1 transmission and this has resulted in the identification of different target cells, pathways and receptors that are involved. It is now the responsibility of the researchers to find approaches that translate these interesting *in vitro*, *ex vivo* and *in vivo* data into knowledge on the mechanisms involved in the spread of HIV-1 in the global population.