

Oral presentation

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Immune activation, viral replication and mucosal depletion

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The case for a close causal relation of immune activation to disease progression is strong. Moreover, ongoing viral replication and chronic immune activation drive each other. However, different measures of the viral load, such as the frequency and/or diversity of viral DNA containing CD4+ memory cells, are better correlated to both disease progression and immune activation than viremia. This can be rationalized in terms of the activation burst theory. I will discuss in vivo labeling experiments in macaques that support this theory and that indicate that persistent mucosal depletion may be largely a consequence of a selectively diminished supply of tissue-seeking CD4+ T cells by the lymph nodes.