“IL-17c, peripheral nervous system and herpes infection”

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The mammalian peripheral nervous system (PNS) has significant capacity to regenerate, which is largely dictated by the interactions between peripheral neurons and their targets. HSV is an alpha herpes virus that establishes latency in sensory ganglia, reactivates frequently in peripheral skin and is rarely associated with sensory neuropathy; an intriguing question is how PNS maintains their function in spite of chronic reactivation? I will show how IL-17c mediates interaction of epidermal keratinocytes, reactivating viruses and PNS and promotes peripheral nerve growth in humans and discuss that IL-17c possesses similar neurotrophic functions for PNS in mice. In summary, these studies suggest that IL-17c is a neurotrophic cytokine for PNS and understanding IL-17c pathways may provide novel approaches for treating sensory peripheral neuropathies.

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3pm-4pm: seminar

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