SIgN Immunology Seminar

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Priming tissue-resident memory T cells for long-lived peripheral immunity

Host
Dr Ng Lai Guan
Singapore Immunology Network, A*Star

Date
Thursday,
4 October 2012

Time
11am – 12pm

Venue
SIgN Seminar Room,
Immunos Building
Level 4
Biopolis

Infections localised to peripheral tissues such as the skin result in the priming of T cell responses that function to control pathogens. However, long-lived protection in peripheral tissues can be difficult to achieve following vaccination. We have found key differences in the migration and tissue localisation of memory CD4 and CD8 T cells following peripheral infections. Dissection of resident memory CD8 T cells (Trm) present in the skin or vagina after infection reveals a unique population of dynamic cells specialized in local protection from infection. Using non-specific stimuli and vaccination, populations of Trm can be generated in these tissues where they provide long-lived protective immunity.