

SIgN SEMINAR

Hosted by Prof LAM Kong Peng



Prof Kenji KABASHIMA

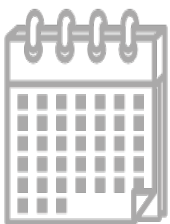
Chair & Professor, Department of Dermatology,
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Medicine

Identification of HEV-like Endothelial Cells and CD4+ Resident Memory T Cells In Atopic Dermatitis

Chronic inflammatory skin diseases such as atopic dermatitis (AD) often recur at the same anatomical sites, suggesting localized immune memory. CD4⁺ tissue-resident memory T (Trm) cells contribute to this process by persisting in the skin and initiating rapid immune responses upon antigen re-exposure. In both delayed-type hypersensitivity and AD-like models, CD4⁺ Trm cells accumulated in the dermis after inflammation and clustered with CD301b⁺ dermal dendritic cells. Their maintenance depended on the CD301b⁺ DC–CXCL16–CXCR6 axis; CXCR6⁺ Trm cells exhibited effector functions, and blocking CXCL16 suppressed their proliferation and recall responses.

In parallel, Prof Kabashima's lab identified high endothelial venule (HEV)-like vessels in inflamed skin of the MC903-induced murine AD model. These PNA⁺ vessels, structurally similar to lymph node HEVs but with elevated selectin expression, promoted lymphocyte infiltration via LTA1b2–LTbR signaling. Notably, they regressed after inflammation resolved but were rapidly reinduced upon re-inflammation, driven by epigenetic modifications linked to angiogenesis and PNA⁺ synthesis.



26 January 2026 (Monday)
10 – 11 AM (Singapore Time)

SIgN Seminar Room
8A Biomedical Grove, Immunos, #04-06
Singapore 138648

*Seminar is
open for all
to attend.*

*Registration
is not
required.*

