

THE UNIVERSITY OF HONG KONG

Department of Anatomy *and* Centre for Cancer Research

A joint seminar entitled:

"Interferon-producing killer dendritic cell: a potential target for anti-viral and anti-tumor immunotherapy"

by

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on Friday, February 6, 2009 at 9:30 a.m.

in the Anatomy Seminar Room
L1-19, 1/F. Laboratory Block
Faculty of Medicine Building
21 Sassoon Road
Hong Kong

All are welcome

Abstract

Effective immune responses require efficient communications between innate and adaptive immunity that orchestrate among various immune cell populations. Natural killer (NK) cells have a crucial role in combating infections and cancers by directly recognizing and responding to damaged, transformed or non-self cells. Dendritic cells (DCs) are professional antigen presenting cells (APCs) that specialize in the stimulation of naïve T cells and serve a key component in bridging innate and adaptive immunity. DCs represent a very heterogeneous population including subsets characterized by their anatomical locations and specific missions. We have recently discovered a novel rare hybrid immune cell type, termed an interferon-producing killer DC (IKDC), that expresses both NK-related and DC-related molecules. IKDC exhibit cytolytic activity towards tumor targets and can process and present Ag to T cells. Our findings hint at a potential role of IKDC in antitumor and antiviral immunity with dual functions as both the assassin and messenger of the immune system. Our latest progresses of the role of IKDC in viral infection and trauma will also be discussed.