DukeNUS Medical School

Signature Seminar Series

Multiple Strategies For Immune Enhancement During Ageing

ABOUT THE LECTURE

Immunity declines with age however immune changes are usually measured in blood leukocytes that may not reflect alterations in tissue-specific immunity. We used an antigen challenge system in human skin to investigate changes in cellular interactions in the skin that lead to decreased immunity of older subjects in vivo. We showed that we could enhance the immune responsiveness of these individuals by vaccination, by blocking baseline inflammation using a p38 MAPKinase inhibitor, and by vitamin D supplementation in vivo. The function of T cells can also be directly targeted to enhance their function by disrupting a novel immune inhibitory complex that is found in old/senescent T cells. The mechanisms involved in immune enhancement that is induced by these different strategies will be discussed in this presentation.

Speaker: **Prof Arne N. Akbar**
Professor of Immunology
University College London

Host: **Associate Prof Ong Sin Tiong**
Cancer and Stem Cell Biology Programme
Duke-NUS Medical School



Date: **Tuesday, 16 May 2023**

Time: **12.00 PM - 1.00 PM**
(Light refreshment will be served at 11.30AM)

Venue: **Duke-NUS Medical School**
Amphitheatre, Level 2

Contact Person: **Ms Serene Wie (serene.wie@duke-nus.edu.sg)**
Duke-NUS Research Affairs Department

ABOUT THE SPEAKER

The Akbar Group have identified new mechanisms for immune decline in human ageing and has demonstrated unequivocally that targeting these age-associated alterations can enhance human immunity in vivo. The importance of these new discoveries is underscored by infections by novel viruses, that affect the older population disproportionately and these new findings offer the possibility to enhance anti-viral and anti-cancer immunity in old subjects.

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