CANCER SCIENCE INSTITUTE OF SINGAPORE

SEMINAR ANNOUNCEMENT

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Cancer: Origination in Stem Cells but Initiation by Progenitors

Date: **Tuesday, 26 May 2015**

Time: **2pm – 3pm**

Venue: **LT 36, Level 3 Auditorium, MD 6**
14 Medical Drive, Singapore 117599

Abstract:

The catchphrase 'Precision Medicine' is the latest restatement of the enduring translational research goal - to selectively suppress cancer clones and spare the normal stem cells needed for health and life. In short, a better therapeutic index. One example of a difference between cancer stem cells and normal stem cells is frequent genetic inactivation of the master apoptosis-regulator TP53 (p53) in cancer. Unfortunately, this is a difference that undermines the therapeutic index of most current oncotherapeutics and radiation, which intend apoptosis. Fortunately, there are mandatory compartment shifts during neoplastic evolution that offer a wealth of discriminating molecular targets, not restricted to mutated oncoproteins. This Achilles heel, including specific targets and clinical proof of principle, will be discussed in detail.

Biography:

Prof Saunthararajah is a Staff Physician at Cleveland Clinic and Professor of Medicine at Lerner College of Medicine of Case Western Reserve University. He obtained his undergraduate and medical degrees at the University of Wales College of Medicine (Cardiff University), served as Captain (Military Medicine) in the Singapore Armed Forces, and completed residencies at the University of Hawaii and a Fellowship at the National Institutes of Health in Bethesda, Maryland. His research interests lie in developing epigenetic therapeutics for hematologic malignancies and blood disorders. Conventional therapeutic techniques use cell death genes to stop cancer growth. Prof Saunthararajah's research has demonstrated the effectiveness of using proliferation-terminating specialization genes instead, a non-toxic method to spare normal stem cells that are typically intact but epigenetically suppressed. Prof Saunthararajah also serves on a National Institutes of Health Advisory Board and is supported by various grants awarded by the National Institutes of Health.