Abstract:
Rhabdomyosarcoma (RMS) is the most common soft-tissue sarcoma in children in which myogenic precursor cells fail to undergo differentiation. There are two major subtypes: alveolar rhabdomyosarcoma characterized by expression of PAX3-FOXO1 fusion protein; and the embryonal type, which is fusion-negative. Current standard of care is ineffective in high risk disease. Epigenetic de-regulation is a hallmark of cancer. To identify chromatin modifiers that sustain tumor growth and underlie the myogenic differentiation defect in RMS, we performed epigenetic screen and found that inhibition of lysine methyltransferases that mediate H3K9 di-methylation significantly impact viability of RMS cell lines. I will discuss our recent findings on G9a-dependent pathways that mediate the differentiation block in RMS.

Date:
19 March 2020
(Thursday)

Venue:
Amphitheatre, Level 2
Duke-NUS Medical School
8, College Road,
Singapore 169857

Time:
12:00 - 1:00 p.m.

Host:
David Virshup
Professor & Director
Programme in Cancer & Stem Cell Biology
Duke-NUS Medical School
Singapore

Registration is required.
All are welcome.
Registration is limited to 50 persons only.
Any enquiries, please contact:
Nakeisha Tan (+65 6601 5224)

Reshma Taneja received her Ph.D. at the Indian Institute of Science, and did her postdoctoral training in Pierre Chambon's lab in France. Her laboratory initially at the Mount Sinai School of Medicine in New York and currently at NUS, is interested in understanding the epigenetic landscape in skeletal myogenesis and its de-regulation in human myopathies. She is recipient of the Scholar Award from the Leukemia and Lymphoma Society, Basil O'Connor Award in the USA; as well as Faculty Research Excellence, Faculty Teaching Excellence and Mentoring Awards at NUS.