

CANCER SCIENCE INSTITUTE OF SINGAPORE

DISTINGUISHED SPEAKERS SERIES 2014

Charles Mullighan

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Acute Lymphoblastic Leukemia: Lessons from the Genome

Date: Friday, 28 March 2014

Time: 11am – 12pm

Venue: LT 36, Centre for Translational Medicine, Level 3
 (14 Medical Drive, Singapore 117599)

Chair: Prof Daniel Tenen

Abstract:

Acute lymphoblastic leukemia is the commonest childhood cancer and a leading cause of childhood cancer death. Genomic profiling and sequencing have provided a comprehensive view of genomic alterations in ALL, and have identified new disease subtypes, implicated new genes and pathways as central pathogenic lesions, and have identified new targets for therapeutic intervention. Insights from these studies will be presented, with an emphasis on key translational insights.

Biography:

Charles Mullighan, MBBS(Hons), MSc, MD, FRACP, FRCPA, FFS(BCPA) earned his Bachelor and Doctor of Medicine degrees from the University of Adelaide, Australia, and his Master of Science degree from the University of London. He trained in hematology and hematopathology in Adelaide. He trained as a postdoctoral fellow at St Jude from 2004-2008 in the laboratory of James Downing. He joined the faculty in 2008 and is currently Member in the Department of Pathology, co-leader of the Hematologic Malignancies Program and Medical Director of the Tissue Resources Core Facility. His research uses genomic profiling and experimental modeling to investigate the genetic basis of acute leukemia, with a focus on high risk acute lymphoblastic leukemia. This work has identified several new genetic alterations that contribute to the development of leukemia, and have entered the clinic as diagnostic tests and new therapeutic targets. He has published over 130 peer-reviewed articles in journals including Nature, Nature Genetics, Nature Medicine, Science, N Engl J Med, PNAS, Cancer Cell and leading specialist journals. He has earned several honors including being named a Pew Scholar in the Biomedical Sciences (2009), the Society for Pediatric Pathology Lotte Strauss Prize, being awarded the American Society for Hematology Merit Award (2007) and Joanne Levy Memorial Award for Outstanding Achievement (2008), election to the American Society of Clinical Investigation (2012), and the Meyenburg Prize for Cancer Research (2012).