Overview of Personalized Medicine Applied to Oncology and Novel Approach to Target Aggressive Cancer Cells

Abstract:
The Cancer Avatar Project at CPMCRI is a multimodal approach which includes living biology, genomics, high-throughput pharmacologic screening, and informatics used to design individualized treatment options for fast growing solid tumors in patients who exhausted standard of care options. After quality control, tumor samples are sequenced to search for cancer-related mutations, and to identify which genes are driving the cancer process. We have also optimized sequencing of liquid biopsies that consist of circulating tumor DNA (ctDNA) obtained from patient’s blood. Mutations identified in ctDNA can reflect alterations found in the primary tumor. This information is instrumental in designing treatment strategies in patients with recurrent or progressive disease. Besides screening conventional chemotherapeutic agents, we are also testing non-psychoactive, non-toxic, cannabinoid compounds. This type of compounds is now available in medical dispensaries in the USA and in Europe, and is being used by patients who are desperate to try novel approaches to treat their aggressive cancer. The discovery of the mechanisms of cannabinoid anti-metastatic activity is therefore urgently needed.

Date: 20 March 2020 (Friday)
Venue: Amphitheatre
Level 2
Duke-NUS Medical School
8 College Road
Singapore 169857
Time: 12:00 - 1:00 p.m.

Speaker:
Dr. Pierre-Yves Desprez
Senior Scientist, Principal Investigator
California Pacific Medical Center Research Institute
San Francisco, USA

Dr. Desprez joined the University of California at Berkeley after completion of his doctoral thesis at the University of Lyon in France. He has been a Principal Investigator at CPMC in San Francisco since 1996. The Desprez laboratory is focused on transcriptional regulators in controlling cancer progression, as well as on the effects of non-psychoactive cannabinoid compounds. As part as the Cancer Avatar Project, Dr. Desprez leads DNA/RNA sequencing and molecular profiling efforts.

Host:
Koji Itahana, PhD
Associate Professor
Programme in Cancer & Stem Cell Biology
Duke-NUS Medical School
Singapore

Registration is required.
All are welcome.
Registration limited to 50 persons only
Any enquiries, please contact:
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