CSCB Seminar Series



Title:

"A bad penny. Copper, MEK and Cancer."

Abstract:

Oncogenic BRAF phosphorylates and activates the MEK1/2 kinases, which in turn phosphorylate and activate the ERK1/2 kinases to promote a wide variety of cancers. Targeting MEK1/2 is proving to be an important therapeutic strategy. In this regard, we found that MEK1 requires copper to promote BRAF oncogenic signaling and tumorigenesis. Moreover, copper chelators used in the treatment of Wilson disease decreased tumor growth of human or murine cells transformed by BRAFV600E or engineered to be resistant to BRAF inhibition. Taken together, these results suggest that Cu-chelation therapy could be repurposed to treat oncogenic BRAF-positive human cancers.

Date:

7 July 2014 (Monday)

Time:

12:00 NN to 1:00 PM

(Lunch provided after 1 PM)

Venue:

Amphitheatre, Level 2 Duke-NUS Grad Med School 8 College Road, S169857

(Opposite Singapore General Hospital, Block 6/7)

Speaker:



Christopher COUNTER, Ph.D. Professor Pharmacology & Cancer Biology Radiation Oncology Duke University Medical Center

Biography:

Dr. Counter is a Professor in the Department of Pharmacology and Cancer Biology at Duke University (USA). His lab studies how the oncogene RAS and its effector proteins promote cancer.

Host:

David VIRSHUP, M.D.

Professor & Director Program in Cancer & Stem Cell Biology Duke-NUS Graduate Medical School Singapore

No registration is required. Any enquiry, please contact Lilian Poon (Tel: 6601 3779).