Shp2 and cell signaling in health and cancer, 30 years’ research that initiated in Toronto

Dr. Feng has made seminal contributions to the understanding of cross-talks and regulation of signaling pathways in various cell types in health and diseases. This work was initiated by discovery of an SH2-containing tyrosine phosphatase Shp2 (Syp) in his postdoc studies (Feng et al., Science, 1993). His research has led to establishment of a dogma that a PTP promotes signaling from RTKs to the Ras/Erk pathway. His group was the first to identify a positive role of Shp2 in control of embryonic, hematopoietic and neural stem cell differentiation. He has contributed to deciphering Shp2 as the first oncogenic tyrosine phosphatase in cancer.

The current focus of his lab is on elucidating the paradoxical anti-oncogenic effects of classical oncoproteins in hepato-carcinogenesis, which his and other labs identified recently. This line of research provides fresh views on liver cancer initiation and progression, and identifies novel targets for early detection and therapy of the malignant disease. By elucidating multi-faceted roles of the immune ecosystem, Dr. Feng is developing new thoughts and strategies for design of combinatorial liver cancer immunotherapy through coordinated activation of innate and adaptive immune cells.

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Host: Dr. C.C. Hui
Date: Monday September 26th, 2022
Time: 2:30 PM
Place: PGCRL, Event Room 1 (2nd Floor)