Interplay of DNA damage response and mitochondrial integrity

ATR plays a vital role in safeguarding the genome integrity by controlling specifically the S-phase checkpoint, DNA repair, apoptosis and transcription. Proliferating cells cannot tolerate ATR loss due to ATR’s function in DNA replication. Hypomorphic mutations of ATR lead to ATR-Seckel syndrome, a genomic instability disorder, characterized by growth retardation, microcephaly and intellectual disability, which suggest an unknown role for ATR in non-dividing cells, for example in neurons. Using various mouse and cellular models, we discover a novel function of ATR in mitochondria integrity and neuronal activity.

Thursday
15 October 2020
4:00pm – 5:00pm
via ZOOM platform
Registration at:
https://cuhk.zoom.us/meeting/register/tJYof--qqDkuGdCfizIH3nGRnR0hBxQKJN_-

The Chinese University of Hong Kong

*** All are Welcome ***