

Research Interests

Yan Yuan Ph.D.

Dr. Yuan is interested in the role of KSHV lytic genes in virus evasion of the immune system and the control of lytic gene expression. Increasing evidence suggests that this virus is the etiologic agent of KS, PELs, the leading neoplasm of AIDS patients. Several KSHV immediate early (IE) genes have been identified in his lab, and the functional roles of these IE genes in viral reactivation and pathogenesis have been investigated. ORF50 was found to be a transcriptional activator; ORF45 was shown to subvert interferon-related host antiviral defenses by inhibiting virus-induced interferon production by blocking IRF-7 phosphorylation and nuclear translocation. His laboratory is investigating KSHV Ori-Lyt and the role of the Ori-Lyt binding protein K8 in KSHV lytic DNA replication.

Interactions with other trainers: Dr. Yuan has frequent interactions with the trainers in the Tumor Virology program. As a member he and his lab actively participates in program meetings. He also collaborates with Dr. Lieberman, Robertson and Yang and has published on KSHV lytic replication.