

ID LABS SEMINAR SERIES



Dr Nair Sharmila

University of Washington in St. Louis, USA



Friday 8th October 2021 10am to 11am (SGT)

Join zoom meeting <u>here</u> Meeting ID: 971 2544 0079 Passcode: 958548



Webinar is open to all No registration required

Leveraging Zika virus and the immune system to treat glioblastoma

Immune suppressive cells and poor T cell infiltration are common in glioblastoma tumours. Since no viable immunotherapies have found success for glioblastoma tumours in clinics the average life expectancy of a patient with this disease is between 6 and 24 months. Therefore for solid tumors such as these oncolytic virotherapy is an attractive treatment option. By boosting antigen cross-presentation and unique immunomodulatory mechanisms in monocytes, I define Zika virus's oncolytic activity to offer therapeutic potential by targeting glioblastoma tumours and initiate anti-tumor myeloid and T cell responses.

Dr. Sharmila Nair received her Ph.D. from Helmholtz Center for Infection Research in Germany in the lab of Dr. Andrea Kröger where she studied immune responses against neurotropic viruses. Following her Ph.D., she received a postdoctoral fellowship award from the German Research Foundation (DFG) and joined the laboratory of Michael Diamond to investigate the interface between viral pathogenesis and host immune responses. During this time, I also branched into investigating the efficacy of ZIKA virus as an agent for cancer destruction and potentiating anti-tumor immunity. Her postdoctoral research work has resulted in multiple first author publications including publications in JEM, JCI Insight, and J. Virology.