Azadi Ka Amrit Mahotsav

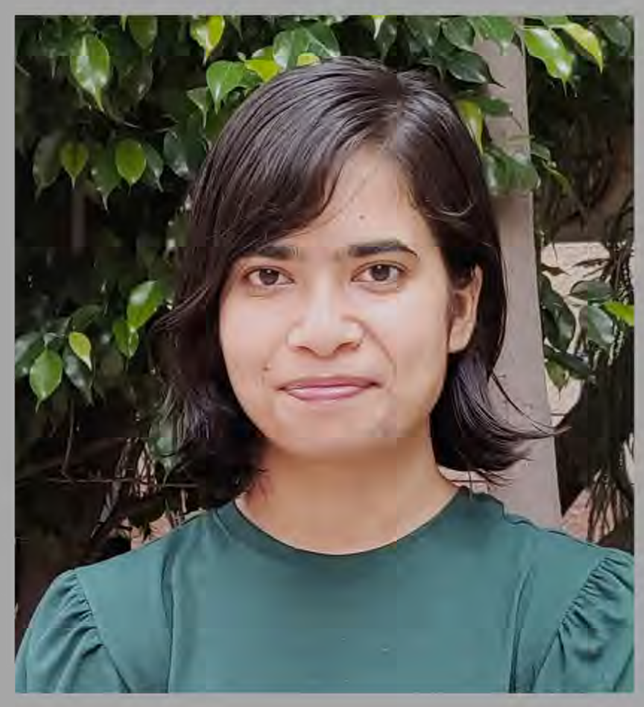
सत्यमेव जयते

राष्ट्रीय प्रतिरक्षाविज्ञान संस्थान

National Institute of Immunology

GRADUATE STUDENT SEMINAR

DISSECTING THE ROLE OF miRNA IN CELL CYCLE RELATED NEURONAL APOPTOSIS (CRNA)



KOMAL

EUKARYOTIC GENE EXPRESSION LABORATORY

Aberrant activation of the cell cycle of terminally-differentiated neurons results in their apoptosis and is known to contribute to neuronal loss in various neurodegenerative disorders like Alzheimer's Disease (AD). Deregulation of miRNA that targets cell cycle-related genes was observed in neurons of an animal model of AD. Investigations on one of the miRNAs revealed that it suppresses the cell cycle during neuronal differentiation. In response to neurotoxic amyloid peptide Ab42, its expression was impaired, which contributes to Cell cycle Related Neuronal Apoptosis (CRNA). Molecular mechanisms via which this miRNA is deregulated, which in turn may contribute to CRNA, are being investigated.

13 JULY 2023, 4.00 PM

GP TALWAR AUDITORIUM, NII

राष्ट्रीय प्रतिरक्षाविज्ञान संस्थान

National Institute of Immunology

GRADUATE STUDENT SEMINAR

UNDERSTANDING THE ROLE OF NUCLEOTIDE SALVAGE PATHWAY IN PNEUMOCOCCAL BIOLOGY AND VIRULENCE

ANKITA YADAV

MOLECULAR IMMUNOLOGY LABORATORY

Streptococcus pneumoniae is a leading cause of bacterial pneumonia, septicemia, and meningitis. It is responsible for most of the pediatric deaths caused due to bacterial pneumonia. Pneumococcus depends upon its host for nutrition and has co-evolved various pathways to synthesize and scavenge vital nutrients. The role of salvage metabolic pathways in pneumococcal biology and virulence remains poorly understood. In this study we aim to understand the role of nucleotide salvage pathway and pyrimidine nucleoside phosphorylase in pneumococcal metabolism and virulence. We employ in vitro and in vivo models along with mass spectroscopy for these studies.

13 JULY 2023, 4.30 PM

GP TALWAR AUDITORIUM, NII