

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**

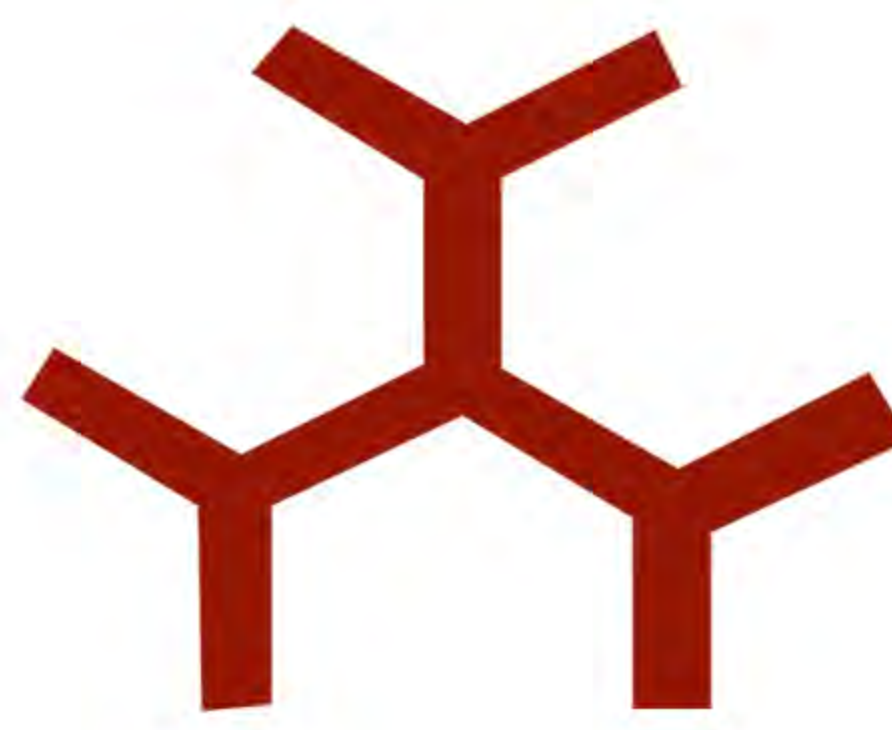


Aberrant activation of the cell cycle of terminally-differentiated neurons results in their apoptosis and is known to contribute to neuronal loss in various neurodegenerative disorders like Alzheimer's Disease (AD). Deregulation of miRNA that targets cell cycle-related genes was observed in neurons of 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**





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**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**