
Registration Seminar

Seminar Title : Understanding the role of colocalization of RNA G quadruplex structure with pseudouridine modification on the mRNA function and stability

Speaker : Smruti Rekha Biswal (Rollno : 522ls6010)

Supervisor : Prof. Santosh Kumar

Venue : LS Seminar Hall

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Abstract : RNA biogenesis is influenced by many factors which would decide its structure, coding ability and stability. The factors that influence its regulatory roles are various epitranscriptomic modifications, several canonical and non canonical structures, and RNA binding proteins. Out of these pseudouridine and G quadruplexes are two of the factors that influence its metabolism. Both have been implicated in changing the coding capacity of the RNA as well as its stability and are known to be colocalized in the RNA. Hence, it is crucial to investigate the crosstalk between the two and their synergy. In this study we are investigating the role of RNA G quadruplex with and without pseudouridine to check their impact on the ABHD17A and VARS1 mRNA metabolism. The findings of this study may contribute towards finding the new therapeutic targets for genetically related illnesses.

Keywords: RNA G-quadruplex, Pseudouridine, ABHD17A, RNA Binding Proteins, mRNA metabolism