



Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500 046

## Students' Annual Webinar

## Development of a fly model to probe the functions of inorganic polyphosphates (polyP) in vivo

## Sunayana Sarkar

Inorganic polyphosphate (polyP), which consists of chains of orthophosphate residues of varying chain lengths, is found in all living organisms alongside other phosphate-rich biomolecules such as ATP and inositol phosphates. The biological functions of polyP have been extensively studied in prokaryotes and unicellular eukaryotes, however, their functions in metazoans are largely underexplored. The major limitation in testing the functions of polyP in metazoans is the elusiveness of the genes involved in polyP synthesis and turnover, which restricts the modulation of polyP levels in vivo. Thus we are trying to develop a Drosophila model to study the functions of polyP. In this talk, I will try to surmise our updates so far. Having a metazoan model will help the field in the broader aspect to probe polyP functions in an organismal context.

Wednesday, May 25<sup>th</sup> 2022 4:00 PM