Tata Institute of Fundamental Research
Survey No. 36/P, Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad – 500 046

Internal Webinar

Understanding the Role of Genes Regulating Myo-syncytial Homeostasis in Drosophila Melanogaster

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SDSOS, Mumbai

In a pilot study, a knockdown of certain genes caused a disrupted flight ability in Drosophila. My work dealt in looking for phenotypic changes in the actin and mitochondrial organisation within the flight muscles, by setting up a cross for a muscle-specific knockdown for 6 genes in Drosophila. The results provided a hypothesis on the roles of the genes that were observed to cause disruptions in myofibrillar architecture and thus a loss in muscle cell homeostasis. Similarly, my previous work dealt in generating a HA-tagged construct of an endogenous gene CG17544- which upon knockdown caused impaired flight ability in Drosophila. This cloning employed the CRISPR-Cas9 knock-in strategy.

Monday, Aug 12th 2024

16:30 Hrs