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

Seminar

Chromatin regulation and transcriptional addiction in cancer

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My research program focuses on investigating the molecular epigenetic events and mechanisms of transcriptional addiction that play a crucial role in uncontrolled proliferation, metastasis, and therapy resistance in cancer. Transcriptional addiction occurs when cancer cells become 'addicted' to continuous and excessive activity of chromatin regulators and oncogenic transcription factors. Our work has demonstrated that certain chromatin writers (NSD2, MLL-Menin, CDK9, CDK7), readers (BET proteins), and erasers (protein phosphatase PP2A) can serve as targetable transcriptional coactivators in cancer (Asangani et al., Molecular Cell 2013; Malik et al., Nature Medicine 2015; Pawar et al., Cell Reports 2018; Rasool et al., Cancer Discovery 2019; Asangani et al., Nature 2014; Gollavilli et al., Cancer Research 2018; Rasool et al., Nature Com. 2023). In this presentation, I will discuss our recent studies on how androgen receptor (AR)-driven transcriptional addiction can be therapeutically targeted in the context of prostate cancer progression and therapy resistance.

Friday, July 14th 2023

4:00 PM (Tea / Coffee 03.45 PM)

Auditorium, TIFR-H