

Colloquium

A Directed Transformation of Stem Cells to Neurons by Furan-based Macrocyclic Small Molecules: Validation by RNA Transcriptomic Analysis and A road map for translational research at TIFR Hyderabad

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An ongoing small molecule screening study led to the identification of few macrocyclic compounds that are able to directly convert hPMSC to neuron-like cells. In one case study, using a macrocyclic compound, the RNA sequencing transcriptomic on the trans-differentiated cells provided an insightful information on the ability of macrocyclic compound in up-regulating certain genes that are known to be down-regulated in patients with Alzheimer's and Parkinson's diseases. This talk will focus upon our initial studies which has paved way for exploring the role of macrocyclic compounds on neuronal loss in neurodegenerative disorders.

The second part of the presentation will be based on the various approaches that can be adopted to set up a translational research activity at TIFR-H. I will discuss about our previous success story on translational research at DRILS Hyderabad and our current efforts on setting up an accelerator in biotech at CCMB. A model for translational research activities will be proposed for TIFR-H.

Thursday, Feb 22nd 2018

02:30 PM (Tea/Coffee at 02:00 PM)

Auditorium, TIFR-H