

## **Seminar**

# **Deciphering the Epigenetic code of brain development and function**

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Cell-fate specification during mammalian development involves stable resetting of transcriptional programs and the role of chromatin-mediated regulation in this process has been increasingly appreciated. The nervous system is the most complex organ in all mammalian organisms. The last decade has observed extensive research in understanding how this complexity is generated during neuronal development. Despite exciting progress, very little is known about the function of epigenetic mechanisms in neurogenesis and neuronal activity. Using epigenetics, genomics and molecular biology tools in combination with extensive computational biology approaches we are investigating i) the crosstalk of transcription factors with chromatin during specification of neuronal fate, ii) dynamics of chromatin accessibility during neurogenesis and iii) the function of novel epigenetic regulators during neuronal development. In addition, we are also investigating whether neuronal-activity-dependent gene regulation involves epigenetic reprogramming.

***Saturday, Dec 16<sup>th</sup> 2017***

***11:30 AM (Tea/Coffee at 11:15 AM)***

***Auditorium, TIFR-H***