

## Seminar

#### Regulation of Inter-organ signaling: insights from DMon1

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Insulin signaling is a highly conserved signalling pathway with key roles in regulating nutrient intake, metabolism and thereby growth. Drosophila has been used as model system to understand the molecular underpinnings regulating insulin production and systemic inter-organ signalling. The female reproductive system in Drosophila is acutely sensitive to nutrition and the transition of pre-vitellogenic egg chambers to the mature vitellogenic state is controlled by insulin signalling. This can therefore be used as a model to understand the mechanisms regulating systemic signalling during development and, in response to altered nutritional status.

Mon1 is a conserved endocytic protein involved in the recruitment of Rab7- a step required for the transition of an early endosome to a late endosome. We have identified Mon1 as one of the key players in the neuronal circuitry that controls insulin production to regulate gonad maturation. In my talk I will discuss some of our recent findings in this context.

# Thursday, Aug 29<sup>th</sup> 2019 11:30 AM (Tea/Coffee at 11:00 AM) Auditorium, TIFR-H