

### **Internal Seminar**

#### Identification of retrograde signalling mechanism for stress induced mitochondrial biogenesis

## Deepa Balasubramanian

#### TCIS, Hyderabad

Leigh syndrome is a rare genetic neuro-metabolic disorder. commonly associated which is with mitochondrial dysfunction. It is characterized bv degeneration of the central nervous system (i.e., brain, spinal cord, and optic nerve). Mutation in LRPPRC is known to cause Leigh syndrome. LRPPRC is required for mitochondrial RNA stability. While studying cellular effects of loss of fly homolog of LRPPRC we found a dramatic increase in mitochondrial biogenesis, which appears to be a compensatory response induced by an unknown mitochondrial retrograde signalling pathway. I will discuss about my approaches to uncover this phenomenon.

# *Tuesday, May 15<sup>th</sup> 2018 2:30 PM (Tea/Coffee at 2:00 PM) Seminar Hall, TIFR-H*