

Seminar

The Journey of Myosin from Bench-side to Bed-side

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Ever wondered how your heart pounds during an adrenalin rush? How does the heart tune to produce more work during a rigorous exercise training? The answer to these questions lies in the secrets of an exquisite protein nano-machinery: the cardiac-myosin, the collective force of which lead to the beating of the human heart. In this seminar, I would elucidate how do these myosins function and would like to hypothesize that some of these myosins are kept in reserve and hence do not contribute to the beating of the heart, but are only sequentially recruited as and when required. The addition of these newly hired myosins explains those fast heart beats when you see your love. Imagine this being equivalent of having reverse gas in your vehicle: you only use it when you need it. Unfortunately, this critical recruitment of additional myosins undergoes an aberration due to missense mutations which leads to certain types of heart failure: hypertrophic cardiomyopathy. After all, that which races the heart also breaks it!! This study opens up novel avenues of therapeutic research for such heart failures.

Thursday, Dec 6th 2018

4:00 PM (Tea/Coffee at 3:30 PM)

Seminar Hall, TIFR-H