

Seminar

Dynamics in biomolecular recognition studied by NMR and integrative structural biology

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We employ integrative structural biology to unravel the molecular mechanisms involving the assembly and molecular functions of protein complexes implicated in RNA processing and signalling. For these studies, solution NMR-spectroscopy and SAXS/SANS provide unique information on functionally important dynamics and are combined with X-ray crystallography and electron microscopy to elucidate the structural mechanisms and dynamics of regulatory protein complexes, highlighting the role of conformational dynamics in protein-RNA and protein-protein recognition in the regulation of various aspects of eukaryotic RNA processing.

We also use integrative structural biology approaches in structure-based drug discovery targeting neglected diseases. A recent example of developing small molecule inhibitors of an essential protein-protein interaction in trypanosome parasites will be presented

Tuesday, Oct 10th 2017 11:30 AM (Tea/Coffee at 11:15 AM) Auditorium, TIFR-H (FReT-B)