

## **Students' Annual Webinar**

**Plasmid segregating protein (ParM) a model system to understand actins in terms of its dynamic instability**

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Actins are ubiquitous proteins that respond at the atomic level to the presence/absence of different nucleotides and binding partners which modulate their polymerisation and depolymerisation, exerting control on a number of cellular processes. We plan to use the bacterial actin homolog ParM (and its mutants) to study these processes such as actin assembly, dynamic instability, end capping protection and nucleotide /protein dependent conformational changes. We will be using ss-NMR under fast MAS to study processes for which sample preparation plays a pivotal role. I will be discussing our strategic method plan that involves ParM fibril formation using suitable nucleotide to obtain high resolution spectra for nearly complete assignment of this protein as the first step to study dynamics.

***Thursday, May 5<sup>th</sup> 2022***

***4:00 PM***