

## **Students' Annual Seminar**

### **Towards unravelling the functional role of the N-term domain of *PfRIPR*, an essential protein for malaria infection**

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Malaria is still the major health threat as the concerning parasite *P. falciparum* has developed resistance to artemisinin, the commonly used antimalarial. To develop new effective drugs and vaccines, understanding the underlying protein-protein interactions responsible for the red blood cell invasion process is crucial. One such interaction involves the *PfRh5* interacting protein (*PfRIPR*), which forms a pentameric complex to facilitate erythrocyte invasion. This complex has been poorly understood, and previous cryo-EM studies have revealed only that the small N-terminal domain (NTD) of *PfRIPR* interacts with *PfCyRPA*, another protein in the pentameric complex. To address this knowledge gap, we are chemically synthesising the N-terminal domain (NTD) of *PfRIPR* with the aim of obtaining its three-dimensional structure, which will finally enable us to decipher the binding mode of the pentameric complex.

**Friday, Apr 28<sup>th</sup> 2023**

**11:00 AM**

**CR-4, TIFR-H**