

## **Seminar**

# **Deciphering the unknown interactome of PfRALP1 on the erythrocyte surface via chemical proximity labelling**

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*Plasmodium falciparum* Rhoptry-Associated Leucine Zipper-like Protein 1 (PfRALP1) is an essential protein located in the rhoptry neck of *Plasmodium falciparum* merozoites. It plays an essential role in the invasion of human red blood cells. While PfRALP1 is known to interact with protein(s) on the surface of erythrocytes, the full range of these interactions, or the interactome, is yet to be identified. In this presentation, I will discuss our approach to mapping the proximal interactome of PfRALP1 on erythrocytes using a chemical proximity labelling method. I will cover the strategies we used for EY conjugation with proteins, the synthesis of substrates, and the characterisation of these substrates prior to performing the proximity labelling assay.

***Tuesday, Jul 22<sup>nd</sup> 2025***

***10:00 Hrs (Tea / Coffee 9:45 Hrs)***

***Seminar Hall, TIFRH***