

ALUMNI SEMINAR: An active interface: Motor driven functional patterning of the cell membrane

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July 02, 2024

12:00 to 13:00

Seminar Room

The ability to organise lipids and proteins in fluid membranes at the nano and mesoscale is crucial for cell membrane function in all living cells. In addition to thermodynamically driven self-assembly, functional lipid and protein domains emerge by self-organisation. However, the identity and contribution of molecules driving these stresses remain elusive. We find evidence for two classes of motor proteins that drive the generation of clusters of actin-binding protein and domains of membrane lipids. This motorised membrane system powers a diversity of spatial arrangement of molecules at the plasma membrane, underpinning functional membrane organisation.

Hosted by: Prof. Dr. Maria Garcia-Parajo