

2023. 11. 14 (Tuesday) 10:00 - 11:00

Speaker: **Prof. Justin Molloy**

Centre for Mechanochemical Cell Biology University of Warwick Medical School The Francis Crick Institute

Title: Single molecule studies of vascular damage and DNA damage repair pathways

In the first part of the seminar, Prof. Molloy will describe studies of the DNA damage repair enzymes PARP1&PARP2 using a magnetic tweezers assay that allow control of DNA tension, topology and end-chemistry. The results revealed fundamental mechanisms of DNA-PARP interaction which may aid development of PARP inhibitors. In the second part, he will show, using TIRF microscopy of single molecules, how the blood vessel surface protein, P-selectin, which is secreted by endothelial cells in response to vascular damage, undergoes a sol-gel transition as it diffuses from exocytosis sites across the plasma membrane.

Website: https://www.crick.ac.uk/research/find-a-researcher/justin-molloy

Venue: OIST Lab4 F01

Contact: OIST Membrane Cooperativity Unit, Aki Kusumi

Visit: https://groups.oist.jp/mcu/e-mail: akihiro.kusumi<at>oist.jp