

P033 Encapsulation of protein fibres inside giant lipid vesicles

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The encapsulation of self-assembling protein nano-fibres presents an excellent opportunity to investigate basic physical phenomena that occur in the cytoskeletal structures of biological cells. Here we are investigating the possibility of encapsulating our *de novo* designed fibres into giant unilamellar vesicles. The resulting system will then be probed *via* fluorescence spectroscopy and optical tweezers to examine the effects of encapsulation on the protein fibres and the effects of the presence of the fibres on the encapsulating vesicles.