



| | |
|---|---|
| Title: | Study of Lipid Membranes Interaction With Cholesterol and Functional Peptides |
| Authors: | Kumar, Harshit |
| Keywords: | Lipid Membranes<br>Cholesterol<br>Functional Peptides |
| Issue Date: | Apr-2023 |
| Abstract: | Cellular membranes are important targets for many membrane-active peptides and drug compounds. Here we are interested in deciphering how lipid membranes are perturbed by several membrane-active molecules, such as cholesterol and crucial peptides such as α- amylase. We employ phase-separated ternary lipid model membranes in the form of giant unilamellar vesicles (GUVs) to simulate raft-like structures that have been proposed to gov- ern many important processes in plasma membranes (e.g., intracellular singling and traf- ficking). Specifically, we use phase contrast microscopy to interrogate how those membrane additives modulate the phase behaviour of free-standing GUVs and the bending rigidity of the membranes. We quantify these changes in the bending rigidity of the lipid membrane and predict cellular characteristics. |
| URI: | http://hdl.handle.net/123456789/5424 |
| Appears in Collections: | MS-18 |

Files in This Item:

| File | Description | Size | Format | |
|---|---|---|---|---|
| embargo period.pdf | | 6.04 kB | Adobe PDF | View/Open |

Show full item record