



## Membrane Organization and Protein–Lipid Interactions

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### Message from the Guest Editors

Mounting evidence from super-resolution imaging, quantitative fluorescence imaging, and fractionation assays suggests that biomembranes are highly compartmentalized, with lipids and proteins laterally segregated into nanometer- and/or micrometer-sized domains. Localized enrichment of specific molecules within these membrane domains is one of the key factors for how membrane confers the nonpassive role. Currently, several important questions remain under investigation:

- How do lipids and membrane proteins undergo spatial segregation in the formation of these membrane domains?
- Do proteolipid assemblies act as signaling platforms to assemble key signaling constituents into scaffolds?
- Do lipids directly participate in the membrane binding and activation of proteins?
- How do the lipids and other membrane constituents influence the conformational dynamics of membrane proteins?
- How does membrane-induced conformation/orientation alter the activation states of a protein, their effector recruitment, and oligomerization states?
- How do membrane domains contribute to cell function?

We welcome original articles and reviews with focus on the above points.

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