

Journal of Membrane Biology: Membranes in Disease Section

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Biological membranes act as a unique interface between cells and provide individual identity to them. They are complex, dynamic, anisotropic fluids with interesting physicochemical aspects. The relationship between membranes and diseases has its genesis in a number of interesting factors related to membranes. A remarkable aspect of membrane proteins is their ability to act as drug targets. It is estimated that ~50 % of currently prescribed drugs in all clinical areas target membrane proteins. In addition, the quasi-two-dimensional nature of membranes allows an increase in the local concentration of pathogenic proteins, such as amyloidogenic peptides, giving rise to diseases of misfolding induced by crowding. Another corner stone in the membrane-disease paradigm is the fact that any intracellular pathogen has to cross the plasma membrane of the host cell to establish an infection, thereby allowing a handle on the entry of pathogens by manipulating host membrane composition.

In the post-genomic era of modern biology, research on biological membranes assumes greater relevance due to the

above-mentioned overlapping features of biological membranes with disease progression. The Journal of Membrane Biology (*JMBI*), in its new avatar, will focus on this connection between membranes and disease. Of course, there is nothing in membrane research that is not interdisciplinary, and membrane literature with implications in diseases will clearly have its biophysical, biochemical, and cell biological components. At the end of the day, judicious and intelligent use of these techniques will provide novel insights into biological membrane research related to diseases. This should lead to an overall improvement in the quality of human life across the globe, a goal shared by all practitioners of modern biology.

I look forward to submissions from you to *JMBI* in the new section, *Membranes in Disease*, in the broadest context. I hope the *JMBI* community will identify this section and establish a vibrant, interactive group in this area.

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