DESCRIPTION

The first and only book devoted entirely to MEMBRANE LIPID ASYMMETRY AND ITS BIOLOGICAL IMPLICATIONS

Transmembrane Dynamics of Lipids is comprised of contributions from expert authors from leading research groups that present up-to-date quantitative data on the formation, stability, and biological consequences of the asymmetrical organization of lipids in cell membranes.

Incorporating an impressive amount of new, previously uncollected data, the book examines transmembrane asymmetry and movement of lipids in biological membranes, and methods for the measurement of transmembrane lipid motion, emphasizing the role of lipid flippases and discusses biological functions associated with lipid asymmetry. In addition, it draws attention to important new discoveries in the field, such as the correlation between malfunction of lipid flippases and human diseases such as thrombosis and cancer. The book also addresses the manifold methods that are used to measure the rate of transmembrane movement of lipids in biological and model systems.

The only guide to new discoveries regarding lipids in cell membranes, Transmembrane Dynamics of Lipids is designed to appeal to biophysicists, biochemists, and cellular and molecular biologists working in the growing field of membrane research.
ABOUT THE AUTHOR

Philippe F. Devaux, PhD, is Professor of Physics at the Paris 7 University. He has long-standing expertise in teaching molecular and cellular biophysics and physics applied to biology and medicine. He is the author of almost two hundred scientific papers and three books, and is an Editor of the European Biophysics Journal.

Andreas Herrmann, PhD, is Professor of Molecular Biophysics at Humboldt-University of Berlin. He teaches courses on the subjects of molecular; cell; and membrane biophysics, optical spectroscopy, and fluorescence microscopy. He is the author of more than two hundred scientific papers focusing on lipid dynamics in biological membranes and molecular mechanisms of virus infection.

SERIES

Wiley Series in Protein and Peptide Science

For additional product details, please visit https://www.wiley.com/en-us