Special Issue

Biophysical Properties of Membrane Proteins

Message from the Guest Editor

Membrane proteins are key macromolecules responsible of stimuli detection and transport across lipid bilayers. For example, receptors respond to full and partial agonists, and transporter's function depend upon substrate chemical gradient. In addition, membrane proteins may assemble as heteromeric receptors, or form cross-talking interactions with members of other families which affect signal transduction pathways producing synergistic or sub-additive responses. Biophysical properties associated to membrane protein structure and function are usually studied via a variety of complementary theoretical and state-of-the-art experimental techniques, from the molecular to the cellular field. Therefore, these proteins represent exciting models to gain mechanistic insights such as drug binding, protein folding, channelopathies and molecular architecture of protein complexes. Researchers working on any aspect of biophysics of membrane protein structure and signaling, using bioinformatic tools and/or experimental approaches, are invited to submit original research articles, review articles or perspectives for consideration in this Special Issue.

Guest Editor

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Message from the Editor-in-Chief

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