

Data on the mechanism of resting state membrane raft organization in the literature is rather limited and are confined mostly to the studies coming from our laboratory. Therefore the studies on the resting state raft organization taking into account importance of these structures in membrane/cell function should further our understanding of raft-based mechanisms of cell signaling. These data might also become a basis for the future studies on therapies that are raft-directed. Proposed project contains an approach based on studying interactions of MPP1 with flotillins in solution or reconstituted membrane bilayer. This type of approach should provide details of the molecular mechanism of these interactions. We believe obtained results will allow formulation of the general hypothesis concerning the biological process of resting state rafts organization. Results of our work on the control mechanism of the lateral membrane organization in erythroid cells should be successful and will end with results published in high impact scientific journals.