



(Meta)Genomic, Functional, Structural and Evolutionary Analysis of Transport Systems

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Message from the Guest Editors

Molecular transport systems are essential for life. They move molecules in and out of cells as well as organelles, thus playing critical roles in organismal physiology, homeostasis, and cell–cell communication. Transport proteins include channels, secondary carriers, primary active transporters, group translocators, and transmembrane electron carriers that selectively allow the passage of substrates through membranes. Whether transport is active or passive (depending on the energy requirements of the process), when transporters malfunction there can be catastrophic consequences for a cell. Due to their relevance to human health, more than 50% of all FDA-approved drugs target integral membrane proteins. This Special Issue presents a collection of papers conveying the state of the art in transport biology. These papers describe research ranging from experimental to bioinformatic approaches, contributing toward expanding our functional, evolutionary, and mechanistic understanding of transport systems in all domains of life.





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Message from the Editor-in-Chief

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