

Special Issue

Cell-Penetrating Peptides (CPPs)

Message from the Guest Editor

Cell-penetrating peptides (CPPs) containing 5–30 amino acid residues efficiently pass across cell membranes and are commonly used to deliver a wide range of cargoes intracellularly. CPPs consist of amino acids with a cationic and amphipathic nature. There are several examples of well-established CPPs, such as polyarginine, penetratin, TAT, SynB1, SynB3, PTD-4, MAP, and SBP. These CPPs can deliver drugs or macromolecules to the cytoplasm or the nucleus of cells. The growing interest in the area of peptide–drug conjugates utilizing CPPs to deliver cell impermeable molecules reflects their emerging applications. These CPPs are also utilized to understand transporters' properties, membrane dynamics, and mechanisms of internalization of micro/macromolecules. This Special Issue aims to provide an update on the recent developments in the areas of design, optimization, and employment of CPPs for specific applications, such as drug delivery systems and diagnostic tools, and to explore the mechanisms of CPPs cellular internalization and their combination with nanoparticles. Dr. Rakesh K. Tiwari

Guest Editor

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