Special Issue

Cell-Penetrating Peptides 2016

Message from the Guest Editors

The hydrophobic nature of cell membranes prevents the cellular internalization of exogenous molecules, including different bioactive molecules such as proteins, peptides, and oligonucleotides as well as therapeutics. Discovery of a protein transcription domain that possesses the ability to cross the cell membrane, cellpenetrating peptides (CPPs), has led to a paradigm shift for intracellular delivery of hydrophilic molecules. Since its discovery in the late 1980s, CPPs have been extensively evaluated to assist intracellular delivery of covalently or non-covalently conjugated bioactive cargos, including DNA, siRNA, peptide, protein, liposomes, micelles, nanoparticles, etc. Even though the field of CPPs has advanced rapidly, there is limited data on the mechanism of cellular entry of CPPs, and it remains as a subject of controversy in the literature. Hence, this Special Issue will focus on the recent advancement of CPPs as a vector for drug and gene delivery, as well as a detailed mechanistic evaluation of CPPs-mediated transmembrane transportation.

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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