Special Issue

Polyamines in the Central Nervous System: Neurons, Glial Cells and Diseases

Message from the Guest Editors

Polyamines contribute to the pathogenesis of Alzheimer's, Parkinson's, and other diseases of the central nervous system (CNS), while polyamine supplementation induces regeneration of neurons and increases longevity. In the normal adult CNS, the polyamines spermidine and spermine are accumulated preferentially in astrocytic cells, not in neurons, and are key molecules regulating many receptors and channels. Recent evidence emphasizes that the localization of polyamines; their metabolites, including agmatine; and their biosynthetic enzymes in CNS (brain and retina) vary with age and are altered in diseases. This Special Issue will highlight the uneven functional distribution of polyamines in the CNS, their effects on channels and transporters, as well as their roles in CNS disorders. We invite investigators to contribute high-quality original research and review articles focused on the roles of polyamines in health and disease, concerning the biological functions of neurons, gliotransmission, and the importance in the glial system.

Guest Editors

Dr. Serguei Skatchkov

School of Medicine, Universidad Central del Caribe, Bayamon, PR, USA

Dr. Rüdiger W. Veh

Institut für Zell- und Neurobiologie, Charité - Universitätsmedizin Berlin, Charitéplatz 1, D-10117 Berlin, Germany

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Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

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Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in Biomolecules so far. We would be delighted to welcome you as one of our authors.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

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