

Special Issue

Multiple Sclerosis Pathogenesis: Bridging Innate and Adaptive Immunity

Message from the Guest Editors

Multiple sclerosis (MS) is increasingly recognized as a disorder in which innate and adaptive immune mechanisms converge to drive central nervous system injury and repair. Bridging these traditionally distinct domains is critical to advancing mechanistic understanding and therapeutic innovation. Recent insights into the roles of microglia, astrocytes, complement activation, and ependymal cell dysfunction reveal complex interactions between resident CNS cells and peripheral immune effectors, including B cells and T cells shaped by latent Epstein–Barr virus infection. Meanwhile, advances in cellular immunology and biomarker discovery offer new windows into these dynamic processes, with implications for diagnosis, prognosis, and targeted intervention. This special series brings together interdisciplinary contributions that span glial biology, complement and ependymal cell research, viral immunology, and biomarker translation, aiming to foster a more integrated view of MS pathogenesis and progression.

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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.

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