# **Special Issue**

# Extracellular Vesicles: Advances in Multi-Omics

# Message from the Guest Editor

Extracellular vesicles (EVs) play a pivotal role in intercellular communication, determining physiological and pathological processes in diseases such as cancer, neurodegeneration, and cardiovascular disorders. Recent advances in multi-omics (proteomics, genomics, lipidomics, and metabolomics) have enhanced our understanding of EV biogenesis, cargo trafficking, and functional impact. Alongside these developments, cutting-edge isolation and characterization techniques, including high-resolution characterization by mass spectrometry, imaging, microfluidics, and Al-driven analytics, are accelerating EV research. This Special Issue of the International Journal of Molecular Sciences highlights the integration of multi-omic approaches with innovative methodologies to analyze EV-mediated signaling networks. Furthermore, we also emphasize translational potential, showcasing how EVs serve as biomarkers, therapeutic carriers, and regenerative therapy tools in clinical settings. We invite original research studies, reviews, and perspectives that connect basic science with clinical innovation, encouraging interdisciplinary collaboration.

#### **Guest Editor**

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## Deadline for manuscript submissions

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# Message from the Editor-in-Chief

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### **Editor-in-Chief**

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