

探索胞外體研究的未來創新

Small Packages, Big Impact:

The Next Wave of Extracellular Vesicle Research Innovations

Extracellular vesicle (EV) research is rapidly advancing from fundamental science to translational applications in EV-based personalized therapeutics and diagnostics. Yet, fundamental questions persist regarding EV biology and mechanisms, particularly concerning the heterogeneous interactions between EVs and cells. Recognizing the multilayered heterogeneity of EVs as both a challenge and an opportunity, in my presentation, I will highlight two exciting EV technological advancements developed by our multidisciplinary group. These newly developed technologies address technical gaps in dissecting the molecular contents of EV subsets, contributing to the evolution of EVs as next-generation liquid biopsies for diagnostics and providing better quality control for EV-based therapeutics. We believe these novel approaches could facilitate our understanding of diverse EV biology to advance EV-based personalized diagnostics and therapeutics.