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Regulation of Membrane Traffic in Plants

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Message from the Guest Editors

Dear Colleagues,

Cellular membrane trafficking machinery is integral for packaging, sorting, secreting, internalising and recycling proteins and other molecules across a highly dynamic set of membrane compartments. Membrane traffic in eukaryotes is largely vesicle mediated. In plants, vesicle traffic co-ordinates with osmotic ion transport for plant cell expansion, growth and morphogenesis. Vesicle trafficking in plants achieves spatio-temporal regulation of protein localisation and activity, maintaining dynamic membrane composition and cell surface area, accommodating changes in cell shape and cell size and delivering cell wall components and signalling molecules to the apoplast. At the plasma membrane, cargoes for vesicle traffic include ion channels, receptors and transporters and contribute to cell growth and development and to a wide range of physiological processes that enable plants to survive under fluctuating environmental conditions.



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Message from the Editor-in-Chief

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