

Special Issue

Cytoskeleton Dynamics and Function during Plant Immunity

Message from the Guest Editor

The plant cytoskeleton, comprising a dynamic network of microtubules and actin microfilaments, serves as a key platform for responding to biotic stresses. During plant defense against microbial invaders, the cytoskeleton has been implicated in non-host resistance, PAMP-triggered immunity, and effector-triggered susceptibility. Unique actin arrays are often constructed in cells under attack, and these assist in cell wall fortification, vesicle trafficking and secretion of antimicrobial compounds, modulating the abundance of membrane proteins of the defense machinery, among other important functions. Recent works have linked cytoskeletal remodeling with hallmark signaling events; identified key actin-binding proteins and phospholipids necessary for cytoskeletal dynamics; and characterized effector proteins that bind to or impact on cytoskeletal function. This Special Issue intends to highlight recent advances at the nexus of cytoskeletal dynamics or function and the defense against microbial invaders by providing a collection of up-to-date reviews, mini-reviews, and original research articles.

Guest Editor

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