



Processing extracellular information: MLO signaling in plant reproduction and development

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Plant cells must communicate with their external environment in order to mount appropriate responses. MLO (Mildew Resistance Locus-O) calcium channels play a key role in a variety of plant cell responses during growth and development as well as in responses to pathogens. MLO channels act downstream of FERONIA-type receptor-like kinases and form part of a conserved signaling module that optimizes cellular responses to extracellular information. The mechanisms through which RLK signaling activate MLO channel activity are currently being investigated and include selective trafficking in response to ligand-mediated signaling and phosphorylation by cytoplasmic kinases in the RLK signal transduction cascade. This seminar will describe the role of MLOs in regulating pollen tube-gametophyte interactions during pollination and in the regulation of tip growth in root hairs.

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LIVE STREAM LINK:

[HTTPS://CSB.UTORONTO.CA/LIVE-STREAM/](https://csb.utoronto.ca/live-stream/)