



“Mechanisms of Frizzled localization and its function in synapse formation in *C. elegans*”

Date & Time: Wednesday, June 5 | 1:00PM - 2:00PM PT

Hybrid: LSC3 & Zoom

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Presented by: Dr. Kota Mizumoto

Wnt signaling has been shown to play pivotal roles in diverse developmental processes, including cell proliferation, stem cell maintenance, and cell migration. During nervous system development, Wnt signaling controls neurogenesis, axon guidance, and synapse formation. Dysregulation of Wnt signaling underlies various diseases, including cancer, cardiac hypertrophy, Alzheimer's, and Parkinson's diseases. Previously, we and others showed that Wnt locally inhibits synapse formation via its receptor, Frizzled. However, the mechanisms of Frizzled localization and how Frizzled inhibits synapse formation are unknown. I would like to discuss our ongoing projects, which are primarily conducted by undergraduate students, to address these important questions.