



Discovery Science
Emerging Scholars Lecture

“How to Organize a Neuron: From C. Elegans to Humans”



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Dynamic protein organization within cells underlies fundamental biological processes. This is particularly evident in neurons, which are compartmentalized into distinct axonal and dendritic domains that require unique repertoires of proteins. Loss of polarity in neurons is associated with a wide array of pathologies, underscoring its importance. I identified a conserved and essential mechanism at the axon-dendrite boundary that changes our understanding of how neurons maintain protein compartmentalization over their long lifespan. I found that axonally and dendritically polarized receptors are cleared from the plasma membrane through endocytosis at the axon-dendrite boundary, which prevents receptor diffusion into the inappropriate compartment.

Tuesday
November 1, 2022
4:00 pm CT
214 Light Hall

Add to Calendar!

This lecture series features the most promising young scientists who are making notable discoveries as postdoctoral fellows or early career faculty.

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