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Cover legend: Differential interference contrast image of a *Drosophila* larval whole mount in which the nervous system is labeled with an anti-HRP antibody (red). Synaptotagmin (blue) is localized to the synapse-rich neuropil within the CNS and to neuromuscular junctions in the periphery. Synaptotagmin, the calcium sensor for synchronized synaptic transmission, couples calcium influx to vesicle fusion through an interaction with negatively charged membranes. For more information, see the article by Paddock et al. in this issue (pages 7458 –

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