

Reading questions for Week 5 papers

- What is the difference between homeostatic and Hebbian plasticity? Why is the barrel cortex so important for Hebbian plasticity?
- What is CamKII? What role does it play in synaptic plasticity?
- In Wilbrecht et al., and Seaton et al., did the T286A mutation affect spine gains, spine stabilization/persistence, or both? Based on what you know about CaMKII, do you find this result surprising?
- In Wilbrecht et al., why do you think spine changes happen preferentially at the borders between barrel columns (as opposed to within the columns)?
- In Seaton et al., why do L2/3 basal dendrites exhibit plasticity and apical dendrites do not? Is this the same type of plasticity as L2/3 basal dendrites in the visual cortex?

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