

142nd WPI-IIIS Seminar

Roles of Reward and Inhibitory Control in Perceptual Learning

Perceptual learning (PL) refers to long-term performance improvement on a visual task. We have found that PL results from interactions between reinforcement and bottom-up signals from an exposed feature, irrespective of whether the feature is task-relevant or task-irrelevant (Watanabe et al, *Nature*, 2001; Watanabe et al, 2002, *Nature Neuroscience*; Seitz & Watanabe, *Nature*, 2003; Shibata et al, 2011, *Science*). We also found that PL is determined by inhibitory control (Tsushima et al, 2006, *Science*; Chang et al, 2014, *Current Biol*). That is, low-level visual plasticity is determined by high-level factors (Watanabe & Sasaki, 2015, *Ann Rev Psychol*).



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Date: **Friday, December 21, 2018**

Time: **12:15 – 13:00**

Venue: **1F Auditorium, IIIS Building**



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