

The University of Hong Kong  
Department of Psychology

*Departmental Seminar*

***Face Adaptation across  
the Cortical Hierarchy***

Date: September 8, 2014 (Monday)

Time: 11:30 a.m. – 12:30 p.m.

Venue: Room 8.13, 8/F The Jockey Club Tower, Centennial Campus,  
HKU

Speaker: Dr. Hong Xu

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To fit the mind to the world, our sensory systems adjust constantly to the dynamic environment, a process known as adaptation. Visual adaptation occurs at multiple levels along the cortical hierarchy, starting from low-level areas such as the primary visual cortex (V1) on orientation adaptation, the tilt aftereffect, to higher-level areas such as fusiform face area (FFA) on face adaptation. To address the connection of the two aftereffects, we have previously shown that exposure to a concave curve biased the perception of subsequently presented faces' facial expression judgment, the faces appear happier than they were originally, the cross-level adaptation (Xu et al., 2008). In the following studies, we aimed to reveal the mechanisms of this cross-level adaptation, and extend it to cross-modal adaptation from audition to vision and its neural mechanisms via ERPs recordings. We further investigated whether face aftereffect is generated *de novo* or inherited from the low-level features via visual crowding and brief adaptation (Xu et al., 2012). Besides static face images, we also investigated the effects of motion face adaptation (Wu et al., 2009) and dynamic face adaptation using the bubbles technique (Xu et al., 2013).