

ASHBi SEMINAR

Opto-physiological approach to primate visual cognition: from macaques to marmosets

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Date Monday, 21 August 2023

Time 17:00 – 18:00 [JST]

Venue Conference Room
B1F, Faculty of Medicine Bldg. B

*Register via the right QR code



Abstract

When you see an object, you not only perceive its physical appearance but also experience a non-physical impression such that distinguishes an old friend from strangers. Perirhinal cortex is essential for such perceptual and mnemonic processing of visual objects, but the underlying circuit mechanisms remain unclear. We previously applied optogenetics to macaque monkeys performing an object memory judgement task and found that activation of the perirhinal cortex induced monkeys to judge any presented object as “seen before” even if the monkeys had not seen that object before^{1,2}. This result suggests that perirhinal cortex outputs a semantic feature of learned objects, ‘learned’ or ‘familiarity’. To investigate the perirhinal downstream circuits that guide perceptual and cognitive decisions, my group has begun to study common marmoset for opto-physiological circuit interrogation³. In the seminar, I will discuss my previous works and current attempt.

Organizer : Graduate School of Medicine
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