

# The 63rd Frontier Brain Science Seminar

Sponsored by Research Center for Idling Brain Science (RCIBS)

## Neural mechanisms for persistent pursuit of reward

 **Speaker: Prof. Masaaki Ogawa**

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 **Date : 14th June.2024 (FRI.) 17:00~18:30**

 **Venue : 日医工オーデトリウム (医薬イノベーションセンター1F)**

### Abstract

Rewards are often subject to chance, resulting in situations where animals might not receive them despite taking appropriate actions. Consequently, to maximize the acquisition of specific probabilistic rewards, animals need to develop strategies for coping with their absence, continuing their pursuit of rewards despite the disappointing outcomes. However, the neural mechanisms for developing such coping strategies are poorly understood. I will introduce our recent studies that reveal the distinct roles of dopamine circuits (Ishino et al., Science Advances, 2023) and basal forebrain acetylcholine circuits (Unpublished) for persistent pursuit of rewards.

### Reference

タイトル: Dopamine error signal to actively cope with lack of expected reward

著者: Seiya Ishino, Taisuke Kamada, Gideon A Sarpong, Julia Kitano, Reo Tsukasa, Hisa Mukohira, Fangmiao Sun, Yulong Li, Kenta Kobayashi, Honda Naoki, Naoya Oishi, Masaaki Ogawa

ジャーナル: Science Advances, 2023

※ 本セミナーは、大学院の単位認定の対象となります。

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**Organizer: Jumpei Matsumoto (Dept. of System Emotional Science) (Ext.7216)**